THE MILITARY HISTORY

OF

THE MADRAS ENGINEERS AND PIONEERS,

FROM 1743 UP TO THE PRESENT TIME.

COMPILED BY

MAJOR H. [illegible] VIBART,

ROYAL (LATE MADRAS) ENGINEERS.

IN TWO VOLUMES.

VOL. I.

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INTRODUCTION.

Having obtained, some years ago, a tolerably accurate list of officers who had served in the Corps of Madras Engineers, I was urged by some friends to undertake the compilation of the Military History of the Corps from its commencement up to the present time. At first I was unwilling to attempt this, but the frequent persuasions of a friend, added to the deep interest I have always taken in the Corps, together with the feeling that, perhaps, if I did not take the matter up, nothing would be done, at last overcame my hesitation, and I commenced some six years ago to collect information.

I know well that there are many officers in the Corps who could have done greater justice to the subject, but I trust that my shortcomings will be overlooked by my friends, when they consider that at least I have done my best.

Although a great deal of the book must necessarily, I think, be dry, still I hope I have obtained information

regarding the Corps not previously generally known, which will prove of interest.

I have endeavoured to trace the services of the Madras Engineers, Pioneers, and Sappers, from their origin, and, in my accounts of the various campaigns in which they have been engaged, I have done my utmost to ascertain the manner in which those Corps have contributed to their success. I have made use, whenever practicable, of letters and reports of engineers themselves, and I have availed myself largely of various military works published by officers of the Corps.

The compilation is a record of the gradual development of the Corps, with accounts of all the campaigns in which they have been engaged, with a view to bring prominently to notice the works done by those Corps. I have largely consulted the Madras Government Records, as well as many works published many years ago, and not readily obtainable.

I have to thank the Madras Government and the Military Authorities at Fort St. George for the freest access to their records. Without this, I could have done nothing as regards the earlier history of the Corps. Several of my brother officers have assisted me with information regarding the later campaigns, and I am greatly indebted to them for aid so freely rendered.

I must not forget to add that owing to the kindness of Brigadier-General O'Connell, Quartermaster-General of the Madras Army, I was enabled to make use of any of the numerous plans in his office, careful lists of

which have been prepared under the able direction of Major Kenny Herbert, Assistant Quartermaster-General.

I need say nothing further, but conclude with the hope that my compilation will not be harshly criticised by my friends.

H. M. V.

Corwen, 25th October 1881.

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MILITARY HISTORY

OF THE

MADRAS ENGINEERS

AND PIONEERS.

CHAPTER I.

State of the Carnatic in the last century.—Capture of Madras by the French.—Siege of Fort St. David raised.—Mr. G. Jones' report on fort.—Siege of Pondicherry.—Capture of Ariancopang.—Siege of Pondicherry raised.—Peace between England and France.—Captain Delavaux retires from the service.—Devicottah captured.—Terms of evacuation of Fort St. George by the French.—Benjamin Robins.—His assistants.—Thomas Heath.—Philip Glass.—Death of Robins.—Surrender of Covelong.—Colonel Scott appointed Engineer-General.—Two companies formed.—Death of Colonel Scott.—Capture of Calcutta by Suraja Dowlah.—Clive sends to Madras for an engineer.—Brohier goes to Calcutta.—Call, Chief Engineer at Madras.—The Council asks Call's advice regarding defence of Madras.

It was not till 1770 that the Corps of Madras Engineers was organised on a strictly military basis; but more than a quarter of a century previous to that time, various engineers were employed on the fortifications at Madras and Fort St. David, as well as on other duties of a purely military engineering character.

In 1748 the first regular establishment of engineers was formed. The head of this establishment was named Chief Engineer.

Up to the year 1745 the English governors had merely been at the head of trading establishments, but war having been declared between France and England in 1744, and an English fleet having appeared on the coast with the view of destroying the French settlements, changed the course of affairs.

At this period two nawabs of the Carnatic had been assassinated in succession After the death of the first, Subder Ali (the brother-in-law of Chunda Sahib), Nizam-ul-Mulk, the Subadar of the Deccan, proceeded to Arcot, in the beginning of 1743, with an immense army, and found the Carnatic at his disposal. The young son of Subder Ali had just before his arrival been proclaimed Nawab in his father's place. The Carnatic was, however, in a state of anarchy. "Every petty commandant of a fort assumed the title of Nawab, and no less than eighteen of these little nawabs were introduced to the Nizam in a day. He threatened to scourge the first person who should in the future usurp the title, and named Anwar-u-Din Nawab." He further arranged that when the boy-prince came of age, he would be made Nawab; Anwar-u-Din meantime being his guardian.

In March 1744 the Nizam left the Carnatic, and three months after the boy-nawab was murdered at a wedding feast. It was believed that the murder was instigated by Anwar-u-Din and Mortiz Ali (the uncle of the young Nawab). Nevertheless, Nizam-ul-Mulk confirmed Anwar-u-Din in the post of Nawab; and when war broke out between the French and English he was at the head of affairs in the Carnatic. At this time the English were in possession of two settlements—one at Madras; and the other at Fort St. David, near the mouth of the Ponniar river, and twelve miles south of the French settlement of Pondicherry, which was about 100 miles south of Madras The Dutch had settlements at Pulicat (twenty-four miles north of Madras), and at Sadras (forty miles south of it).

In 1745 the forts at Madras (St. George), and at the Ponniar

(St. David) were formidable enough to deter the natives of the country from attacking them, but were quite unfitted to stand a regular siege and bombardment. It is at this time that we find the first records of professional engineers being called in to give their advice regarding the forts, and Major Knipe's quaint report in 1743 shows clearly how very inferior were the works at Fort St. George. Mr. George Jones' report on Fort St. David, in 1747, clearly establishes the fact that, although Fort St. David was stronger than Fort St. George, it still was but a contemptible place of arms.

It was in 1639 that the English first settled at Madras; previous to that they had a factory at Armegon, north of Madras. They now obtained a strip of coast six miles long and one broad; on this, they built a factory, and surrounded it with a wall, on which they mounted cannon. Mr. Francis Day was the English chief at that time.

In 1644 we find that £2,294 had been spent on the fortifications, and it was estimated that £2,000 more would serve to complete it. The fort was of course but small, and a garrison of 100 men was considered sufficiently strong for its occupation. It is unlikely that Mr. Day had any professional assistance in erecting this fort, as it is certain that the so-called fort merely consisted of a slight wall surrounding the residences of the merchants.

It would appear that for a century after its foundation no material alterations were made to it.

In the year 1740, the President having learnt that 20,000 Mahrattas had arrived at Arcot, and were plundering the country, became alarmed and hastily appointed William Monson, Esq., captain; Mr. John Stretton, lieutenant; and Mr. John Hallyburton, ensign. He also gave certain directions to the storekeeper and gunner regarding the guns and their carriages, and ordered the paymaster to repair the chevaux-de-frises. The alarm excited by the proceedings of the Mahrattas induced the

Directors of the East India Company to send out an experienced engineer officer, Major Charles Knipe, to report on the state of the fortifications. His short and pithy report, given below, will show that in 1743 the fort was hardly entitled to its name.

"Major Charles Knipe having surveyed the fortifications of the town on the west side from Charles' Point to Queen's Point, delivers in a report.

"To the Honourable Richard Benyon, Esq.,
"President and Governor.

"In obedience to your Honour's commands, I have taken a survey of your city of Madraspatam from Charles' Point to the Queen's Point, being that part of the fortifications, as it is called, which faces towards the island; but I must take the liberty to assure you it is no fortification at all, but rather an offensive than defensive wall to your garrison. Was it not for the support it has from the several outhouses of the inhabitants which are all built against it through the whole extent above-mentioned, it could not stand, nor was it more than sufficient for a garden-wall when first erected. As to the river that runs by it, that neither is any addition to the strength of your works, but rather a nuisance to the town; for I observe in every part of it, it is continually forded at less than two feet deep. The plain laid down for enlarging your city and carrying a new fortification across the island from Charles' Point to Queen's Point, above mentioned, I have by your Honour's direction very carefully examined in regard to a foundation, by making small wells of considerable depth from the surface, and by boring several feet deeper in the bottom of each of them through the whole extent of the intended fortification, and find the soil is clay and sand capable of sustaining any weight, especially if assisted with a few wells under the foundation near the river's side, where it is a little spungy. As to the river, I will engage to turn that quite off from your town at a very small expense, and supply its

place with a much better foss, by which the whole island will be drained and become a very firm and solid tract of land.

"This is humbly submitted to your Honour's and the Gentlemen of the Council's consideration by

"Your most obedient servant,

(Signed) —CHARLES KNIPE.

"Fort St. George,
"January 25th, 1743."

But little action could have been taken on this report, for in 1746, when captured by the French, it was as weak as it could well be. It was in January 1748 that that distingeished man Stringer Lawrence arrived from England to command the Company's forces in India with the rank of Major; and in June of the same year the first regular engineer was appointed to the establishment, Captain Alexander Delevaux. From that date a regular establishment of engineers was maintained. This body was of very small strength, and even in 1758 during the siege of Madras, the number of engineers available was only four. These engineers were obtained from various sources. Previous to the siege of Madras in 1758–59, the engineers were considered civilians. At that time, however, military commissions were given to the four engineer officers employed in the defence, and subsequently officers on joining the Engineer Service were granted military rank.

In 1769 the number of engineers in the Madras Service was but eight, and in 1770, when the Engineer Service was re-organised on a purely military basis, the whole Corps consisted of nine officers. This number was gradually increased, but even so late as 1845 the whole amounted to no more than forty-six, and in 1860, when the Corps attained its maximum strength, there were hardly ninety.

As before stated, war was declared between England and France in 1744, and early next year the first naval action took place between the two nations, in the Indian Seas. Commodore

Barnet had been sent with four ships to protect our trade. Two of these he sent to Malacca, and with the others he proceeded himself to the Straits of Banca. He hoisted Dutch colours, and waited for the enemy. Three French ships, mounting thirty guns each, and laden with fine cargoes, appeared. A smart action followed, with the result that all three were captured. Barnet's other two vessels also captured two French vessels from Manilla, with freights of enormous value. Barnet was now anxious to go still further to the East; but the authorities at Madras begged him to repair to that place, and he at once complied with their request. Admiral Labourdonnais, Governor of the Mauritius, was threatening Madras, thinking that as Barnet had been obliged to send two of his vessels home, he would be able easily to defeat him. Barnet had, however, been reinforced by three vessels, and had added one of his prizes to his squadron, so that he was actually stronger than he had been in 1745.

Labourdonnais left the Mauritius early in spring of 1746, and in June arrived on the coast. He had eight ships, carrying 130 more guns than the English; but, in spite of this, owing to the guns of the French being of an inferior calibre to ours, the advantage was really with us. Had Barnet still been in command, Labourdonnais would have been defeated; but in April 1746, Barnet had died at Fort St. David, and Captain Peyton, of the *Medway*, had succeeded to the command. He had six ships cruising north of Ceylon, when Labourdonnais came in sight. Instead of engaging in a battle, Peyton, taking advantage of the better sailing-quality of his ships, refused an engagement, contented himself with a cannonade, and next day actually fled to Trincomallee—leaving Labourdonnais master of the seas. The latter went leisurely to Pondicherry, refitted his ships, and supplied them with heavier guns. In the beginning of August he again came in sight of Peyton, who again fled, when Labourdonnais set himself to the reduction of Madras.

St GEORGE
IN 1733
FORT
St GEORGE
Sea Gate
Scale 500 feet to 1 inch

Fort St. George was insufficient to repel a large European force.

On 3rd September 1746, the French squadron anchored south of Madras, with 1,100 soldiers, 400 Caffres, 400 natives, and 2,000 French seamen.

The English garrison was only 200 men.

The troops were landed on 4th September, and on the 7th bombarded the fort from a battery of nine mortars to the west, 600 yards distant from the walls.

In the evening some of the ships cannonaded the town.

On the 8th, a battery of five mortars was put up to the south, and the bombardment was continued till the 10th September, when the fort surrender[illegible] Madras passed into possession of the French. The [illegible] had seven men killed and wounded.

Mr. (after Lord) Cl[illegible] at Madras. He became a prisoner of war, but [illegible]ed as a native, to Fort St. David.

The Government was now [illegible] to Fort St. David.

On 9th December 1746, a Fren[illegible] of 1,700 men invested Fort St. David. They drove in [illegible]gular peons who had been armed by the English to prot[illegible] territory round Fort St. David; but the Nabob's army, coming [illegible] to the assistance of the English, surprised the [illegible] and threw them into confusion. The garrison there[illegible] a sally, and drove the French back several miles.

The French continued to [illegible] till 19th February 1747.

The English garrison was now [illegible] from England, and marched out and gave battle. An English fleet appeared, and the enemy raised the siege.

Our squadron now consisted of eleven good ships. The result of the reinforcement was that Dupleix was blockaded in Pondicherry (Labourdonnais had returned to the Mauritius,

chiefly owing to Dupleix's jealousy), and our naval superiority was re-established.

The English fleet was commanded by Commodore Griffin, who recommended the Governor to commence on new works for the more perfect defence of Fort St. David. Mr. George Jones, engineer, was accordingly directed to survey the fortifications, and send in a report. On 25th April 1747, he forwarded this report to the Governor in Council, with plan and estimates. "The Board considered that the works ought to be carried out with the utmost vigilance and expedition before the Monsoon sets in." This report had been called for by Mr. Hinde, Governor of Fort St. David, but he having died meantime, the report was presented to Charles Floyer, Esq., who had succeeded him on 15th April 1747.

Mr. Jones considered the fort was too weak and defective to enable us to make an effective defence against the French. He reported that the fort was surrounded with a fausse braye and a ditch of fifty feet.

It appears that the fort was rectangular, with a bastion at each corner.

The interior space was [illegible] yards by 100, or rather more than three acres. The whole of this space was filled with buildings and warehouses, and hence the effects of a bombardment would be dreadful.

He recommended a horn-work on the north side, having 140 yards of "cassimated rampart. The guns, from the curtains thereof, will enfilade the approaches from the Colloway." On the east and west sides he proposed lunettes; each to have four magazines for powder, and in addition to this, there was to be a coverway and glacis.

He suggested that a "very able hand should be sent from England, as it was highly necessary."

It is presumed that these recommendations were carried out not long after, as, when the French attacked the fort in

May 1758, it appears to have been as recommended by Mr. Jones.

The Court of Directors would seem to have approved of Mr. Jones' suggestion that an officer should be sent out from England, for on 13th June 1748 we find that Captain Alexander Delavaux arrived, having been appointed engineer and captain of their train of artillery at Fort St. David; and Mr. George Jones resigned.

In January 1748, Major Stringer Lawrence arrived from England, to command the Company's forces in India.

On 17th June, the French attacked Cuddalore, but were repulsed by Lawrence. On 24th, Lawrence and Delavaux reported that Fort St. David might be kept against the French; but only with the proviso of withdrawing all the soldiers into it, and leaving Cuddalore and all the English bounds exposed to the enemy.

The Artillery Company, commanded by Captain Delavaux, was of the following strength:—

	Salary.
1 First Captain and Chief Engineer	200 £
1 Second Captain and Engineer ...	150 „
1 Captain-Lieutenant and Director of Laboratory	100 „
1 First Lieutenant Fireworker ...	75 „
1 Second Lieutenant do. ...	60 „
1 Ensign do. ...	50 „
4 Sergeant Bombardiers	2s. per diem.
4 Corporal do.	1s. 6d. „
2 Drummers	1s. „
100 Gunners	1s. „

Admiral Boscawen, with the English fleet, arrived at Fort St. David on 29th July, and there found the squadron under Admiral Griffin.

The latter resigned the command, proceeded to Trincomallee, and thence to England.

On 8th August, the Company's forces marched to the siege of Pondicherry, with the reinforcements brought by the Admiral.

The force consisted of the following:—

King's Troops.

12 Companies of 100 men	...	...	...	1,200
800 Marines	..	..	...	800
80 Artillery	...	...	...	80
				2,080

Company's Troops.

1 Battalion	...	...	...	450
70 Artillery	...	...	...	70
Dutch reinforcements		...	...	120
On board ships, 1,000 seamen ready to be landed ...		...	...	1,000
				3,720
300 Topasses	..	...	...	300
				4,020

Besides 2,000 sepoys, not well disciplined.

The Company's Artillery was no doubt the train just formed and commanded by Captain Delavaux, who was also Chief Engineer. The army approaching Pondicherry bounds came in sight of Fort of Ariancopang. An engineer of the Company's troops was ordered to reconnoitre. Orme says he was afraid to go near enough, and reported that it was not strong; on which an attempt was made to storm it. The English troops were assailed with musketry and grape-shot, and finally repulsed with heavy loss. It was, however, determined to reduce the fort. The English engineers erected a battery on the south side of the river; but when they opened fire they found the

guns were intercepted by a thick wood. Orme says, the artillery officers erected another, with greater skill; and fire was kept up on both sides with but little execution. The French cavalry advanced to the entrenchment close to the battery where the sailors were posted. A panic arose and they fled. Major Lawrence was taken prisoner, and carried off to Ariancopang.

The same day a severe explosion took place in the fort, disabling nearly 100 men. Some hours after, the French blew up the fort and retired rapidly to Pondicherry.

The English took possession of Ariancopang, and remained there five days repairing the fort.

On 26th August the army marched and took possession of Oullagary. The French garrisons in the redoubts in the bound hedge were withdrawn.

The Engineers recommended that the town should be attacked on the north-west side.

On 30th August the army broke ground at a distance of 1,500 yards, and Orme says, "by this the engineers showed themselves little skilled in their art."

Two sorties were made by the French, but on both occasions they were repulsed.

The approaches were carried on very slowly owing to a want of experience.

Two batteries of three guns were raised within 1,200 yards. After much labour the trenches were advanced to within 800 yards of the walls.

It was then found that a large morass was before this part of the town; that is on the west side.

Two batteries began to fire on 26th September—one of eight and the other of four pieces of 18 and 24-pounders; besides these there was a bomb battery of five mortars, and fifteen Royals and fifteen Cohorns.

The French now opened several embrasures in the curtain and began to fire from two or three batteries on the crest of the

glacis, so that the fire of the besiegers became less powerful than that of the enemy. Admiral Boscawen ordered the ships to batter the town, but this was not found to be of much use.

The fire from the batteries continued three days longer, that from the town increased, and dismounted nine of our pieces.

Very little impression was made on the defences; sickness prevailed in camp, and the monsoon had set in, so a council of war was summoned, and on 30th September it was determined to raise the siege.

The cannon and heavy stores were embarked on the ships, and the batteries destroyed. On 6th October the troops began to march, having previously blown up the fort at Ariancopang.

During the siege the English lost 1,065 Europeans.

757 Infantry.

43 Artillery.

265 Seamen.

Very few sepoys were killed, as they generally ran away on the approach of danger. Orme blames the engineers for the failure in most unmeasured terms. He says, "The engineers were utterly unqualified for the enterprise, but the artillerymen and officers knew their business."

It must be remembered that the Company's Artillery had only lately been raised, and that the officer commanding the Artillery was also Chief Engineer. No doubt the engineers appear to have blundered from want of experience, and, perhaps, from the indifferent quality of the men at their disposal.

In the event of failures, it frequently happens that the engineers have to suffer the odium of want of success, but when successful they have been too often denied the credit justly theirs, which is calmly appropriated by the general commanding.

In January 1749 news was received of a peace between England and France, and for a time hostilities ceased between the two nations in India.

On the 20th April 1749, Captain Delavaux informed the Council that he was suffering from a disease from which he was not likely to recover, and requested to be allowed to retire from the service and proceed to Europe.

His request was complied with, and one of the lieutenants of the Train of Artillery was directed to take charge of the company and oversee the fortifications.

The English and French, unable to fight against one another in India owing to the peace, determined to assist the native princes in their disputes.

Towards the end of January, accordingly, a force left Fort St. David, under Captain Cope, to assist in reinstating Sahojee, ex-Rajah of Tanjore, on his throne.

This force suffered from a storm while at Porto Novo. After repairing damages, it penetrated into the Tanjore country, but not getting expected assistance from the inhabitants, was compelled to retire to Porto Novo, and next day marched to attack Devicottah. Having no battering train, it was obliged again to retire to Fort St. David.

The English, considering the possession of Devicottah to be of great importance, sent a force against it under the command of Major Lawrence.

On 27th May 1749, the troops embarked and anchored off Devicottah, two days after. On the 29th and 30th the troops landed; on 2nd June they began to make fascines, &c.; and on the 5th opened ground.

On the 8th a battery opened fire on the town, at daybreak, for a few minutes, and then the place was summoned in the name of Sahojee, ex-King of Tanjore.

Lawrence waited two hours, and, having received no reply, ordered our guns and mortars to open fire briskly. This fire

shattered the wall very much, and nearly dismounted all the enemy's guns.

On the 11th a small body of Marines were landed to look after the baggage, while Lawrence attacked the place. That night we were prevented crossing the river by heavy rain. "Mr. More, the carpenter of the train, passed the river the same night, and made fast the rope to the other side of the river to pass our float." As the English battery was on marshy ground, Major Lawrence feared that another day's rain would have rendered it impossible to attempt anything, and he determined to attack on the 12th at 1 P.M. They passed the river by the "float" (raft) made by Mr. More, to the number of 700 sepoys and 400 Europeans. Lieutenant Clive was ordered to drive the enemy from the entrenchment on the left, and 300 sepoys were posted on the right to secure our right flank.

Lieutenant Clive was repulsed, not having been properly supported by the sepoys; however, another party was sent forward to attack the entrenchment, under Sergeant Brown, and Captain Dalton, with the Grenadiers, followed by the main body, attacked the breach, and were in the possession of the fort by 5 o'clock.

In August 1749, Major Lawrence and two others met M. Dupleix and five others, for the purpose of considering the terms of the evacuation of Fort St. George by the French.

1st Article of Treaty.—The gentlemen named,* to go to Madras and take an inventory of effects, artillery, &c.

2nd.—Inventory being finished, the day the town is to be evacuated to be settled.

3rd.—On the day agreed on, English troops to be carried by sea. The French will march out by sea-gate, while the English go in by St. Thomas' Gate.

4th.—As soon as French troops have embarked, the French

* Major S. Lawrence, Mr. Alexander Wynch, Mr. Foss Wescott.

commandant will deliver the keys to the English Commissioner and Admiral Boscawen.

On 2nd September 1749 the commissioners appointed protested against taking Fort St George, as they asserted that it was not in the condition stated in 9th Article of Treaty; guns, mortars, and warlike stores having been carried away.

Although Madras was given up to the English in 1749, the head-quarters of the English Government remained at Fort St. David till 1751.

The Court of Directors about this time appear to have been seriously alarmed regarding the state of the forts.

On 8th December 1749, the Court of Directors appointed Benjamin Robins, Esq., Engineer-General and Commander-in-Chief of Artillery of all settlements in East Indies and St. Helena. He was ordered to proceed to Fort St. David, then to Fort St. George, Fort William, to Bombay and St. Helena.

The following were sent with him as assistants:—

		£
John Brohier, Esq	salary	40
Nathaniel Carrington	"	20
Charles O'Hara	"	20
Sampson Morrice	"	20
Charles Knapton	"	20
Philip Glass	"	20

In addition to these salaries £20 a month was allowed for their diet.

Mr. Robins was under covenant to continue in India until the despatch of the last ships from the place where he shall be resident between the months of January and March 1753-54. And if he lost his passage outward bound, until same time in 1754-55. Mr. Robins was to receive the same civil and military honours as the third in Council.

Houses in the fort were to be provided for Mr. Robins and his

assistants. A smith (Robert Barrowcliffe) and a carpenter (Israel Solfe) were also to proceed, and to be under orders of Chief Engineer. Their salary was to be £60 each per annum, and they contracted to serve for five years.

It appears that some time before, a Mr. Thomas Heath had been sent out to be trained up under Captain Delavaux. He was represented as not having a turn for the profession of an engineer. The Court accordingly directed Mr. Robins to "have a trial of him, and if he finds him incapable or unwilling to assist him, he is to be sent home by one of the first ships." Result of trial not known.

Mr. Robins was a very distinguished scientific artillerist. He was the inventor of the ballistic pendulum. He was also the real narrator of Lord Anson's voyage round the world.

Mr. Robins planned the fortifications of Fort St. David and Madras. When the French delivered Fort St. George to us in 1749 it was incapable of a long defence against Europeans, and the internal area was only fifteen acres. An addition had been projected in 1743 by Mr. Smith. This project doubled the area of the fort. The ditch which marked its limits was then dug, and faced with brick, and was supplied with water from northern river, but nothing was then raised above the surface.

Mr. Robins approved generally of Mr. Smith's project and completed the plans, but was unable to finish the works owing to his death, which took place at Fort St. David on July 29th, 1751.

Orme calls Mr. Robins a man of great science. Mr. Nourse, an eminent bookseller, in 1761 was preparing for the press the learned works of Mr. Robins under the care of Dr. James Wilson. He says in preface:—

"Mr. Robins' abilities as an engineer, I have heard highly praised by many intelligent persons who have been on the spot; and what is still more, I have been informed (by Mr. Orme) that they were approved of by the brave Colonel Clive."

In the years 1750–52 it does not appear that any of the Engineers were employed on active service against the enemy.

It was probably thought of more importance that they should attend to the fortifications of Fort Saint David, &c.

On 26th June 1751, however, we find that "Mr. Clive having arrived from camp yesterday, communicated to the President that Captain Gingens finding that he could not get permission by fair means for the troops into fort of Volconda, the coffres set the suburbs on fire, and he (Gingens) with the main body advanced very near the wall, when the killadar let in a body of French troops with three or four pieces of cannon, which immediately played so briskly on them, he was compelled to retire out of reach of the guns; the coolies having run away, a good deal of the baggage was lost. The troops encamped at Vullatoor —a very strong situation." On hearing this, Mr. B. Robins proposed to go to the camp, but the Council were of opinion that his life was of too much value to be risked in this way. Clive having taken reinforcements to Trichinopoly returned in the beginning of August, and representing the critical situation of affairs at Trichinopoly, proposed to attack Arcot, offering to lead the expedition himself. On 31st August he took Arcot without opposition.

The detachment with which he effected this consisted of 300 sepoys and 200 Europeans with eight officers, six of whom had never been in action, and four of these six had not previously belonged to the army. The names of only five of these officers are known.

Clive was commanding; the other four were:—

Ensign Glass.
Lieutenant Bulkley.
Lieutenant Trenwith.
Lieutenant Revel, the only artillery officer.

Ensign Glass was a volunteer, and distinguished himself highly in the memorable defence of Arcot by Clive. He came

out to Fort St. David as one of Mr. Benjamin Robins' assistants, his name being Philip Glass.

The French during the siege of Arcot took possession of Conjeveram, and surprised a party of disabled men returning; among these were Revel and Glass.

Clive determined to attack Conjeveram and summoned it. The French commandant ordered Revel and Glass to write to Clive and say he intended to expose them on the walls if he attacked. They wrote this, but said they hoped no regard for their safety would induce him to discontinue his efforts. After three days the French abandoned the Pagoda, but left the two prisoners behind.

On 29th July 1751, Mr. Robins expired at Fort St. David, literally with his pen in his hand.

Mr John Brohier was put in entire charge of the works, and "the young gentlemen who were under Mr. Robins" were directed to assist Mr. Brohier.

Mr. Robins, it appears, had requested that Mr. Brohier should succeed him, and also that Mr. John Call (afterwards chief engineer at defence of Fort St. George in 1758–59) should get the same allowance as the other young gentlemen, as he had been employed by Mr. Robins since the beginning of the year.

Mr. O'Hara was also directed to assist Mr. Brohier at Fort St. David, Mr. Charles Knapton being employed on the Company's work to the northward.

On 22nd of September 1752, Captain Clive advises the surrender of Sandet Bunder, or Covelong. On 30th November it was resolved to destroy it, and Mr. John Brohier having been called upon to furnish a report, stated that it would take some time and many workmen.

It was, however, resolved on, and the demolition was commenced on 30th December 1752.

In the Madras Government Records a few names of engineers

are found here and there, but it has been impossible to ascertain when they were appointed, or where they came from, thus:—

On the 12th February 1753, we find that a Mr. Thomas Taylor reports on the breastwork at Syrian. Again, in 1754, we find that Mr. John Smith recommends that Mr. Hopkins should be sent to Negrais, as "being skilled in fortifications and maritime affairs." Further on we find (11th January 1754) Mr. Charles Knapton (one of the assistants who came out with Mr. Robins) desires to be re-called from Negrais, as a Mr. Hunter is there, and two engineers are not required for the place.

In August 1753, Colonel Caroline Frederick Scott came out as Engineer General, apparently on somewhat the same terms as Mr. Robins; he landed at Madras, but set out immediately for Bengal, returning, however, on 15th April 1754.

Major Lawrence at this time was anxious to be relieved of his command, and suggested that Colonel Scott should be directed to relieve him on his arrival, but that officer declined to do so, on the grounds that he was specially sent out to attend to the fortifications of Calcutta, Madras, &c.

About this time two Train Companies were formed, 118 men each. Mr. Brohier was appointed second Captain, and it was stated that one Captain and two Lieutenants were coming out from England.

During the next few years the information available regarding the Engineers is very scanty and unsatisfactory.

In 1755, a Mr. Railland is mentioned in the records as "a good engineer and draughtsman," and appointed to act as lieutenant (it is presumed in the Train).

In 1756, Mr. John Call was the engineer at Fort St. David, and in May of the same year a Mr. Conradi, who "had been employed for two years under the engineer at Fort St. George," was directed to assist him at Fort St. David.

Mr. Smith, engineer, was ordered from Devicottah to Madras,

and Lieutenant Hume, "a very good officer, and qualified as an engineer," to succeed him.

Colonel Scott appears to have died at Calcutta about the middle of 1756, for in September of that year, Mr. Charles Frederick Noble (who was Colonel Scott's secretary), writes to say that Mr. Wells had been left by Colonel Scott to carry out the works.

The Council thereupon directed that Mr. Brohier should be assisted in his work by Mr. Charles Noble, Mr. McDonald (volunteer of the King's Train), and Mr. Leigh (a Company's servant, brought up as an engineer).

On 17th June 1756, Calcutta was taken by Suraja Dowlah, and the tragedy of the Black Hole took place, when out of 145 men and one lady shut up in a close room—not twenty feet square—but twenty-three ghastly figures were brought out alive next morning.

After considerable loss of time, a force was sent to re-take Calcutta, five ships of war, five Company's vessels, with 900 Europeans and 1,500 sepoys under Colonel Clive and Admiral Watson. Clive entered Calcutta on 2nd January 1757, when the fort surrendered at discretion. Clive at once sent down to Madras for an engineer, and the Council, after a good deal of hesitation, directed Captain John Brohier to go to Calcutta, and place himself at the disposal of Colonel Clive.

Mr. John Call was ordered to re-place him at Fort St. George.

Mr. Hume was to proceed to Fort St. David, and Mr. Conradi had to take charge of Devicottah. Mr. McDonald and Mr. Charles Noble appear to have gone to Calcutta as Captain Brohier's assistants.

Captain Brohier does not appear to have left Madras till June, a few days before the battle of Plassey. John Dyer, a master-bricklayer, accompanied him.

On his way up to Calcutta, Captain Brohier was ordered to

land at Vizagapatam, survey the fortifications, and give his advice to Mr. Percival, who was, it is presumed, the chief civil officer there.

Captain Brohier landed on 24th June, at Vizagapatam, and found it invested by the French. He examined the works, and finding them untenable with the troops in it, resolved to embark, and leave Lieutenant Elly to cover retreat and make the best terms he could.

Monsieur Bussy summoned the fort, and finally marched in the French force, consisting of 830 Europeans, infantry, artillery and cavalry, 200 Mahrattas, and 6,000 sepoys.

Captain John Brohier now proceeded on to Calcutta, and was entrusted with the plan and erection of Fort William.

"The works now progressed rapidly, and in the month of September the enceinte was completed, as also the ravelins and covered-way; the facing of the masonry of the escarpment was in a forward state, the covered-way palisaded, and the bridges and drawbridges well advanced; the cost of all this already amounted to twenty-two lacs of rupees.* So badly was the masonry executed, however, that the greater part had subsequently to be re-built, when the height of the works was considerably increased."

Mr. John Call became the chief engineer at Madras, as we have seen, and during the year 1757 was engaged in improving the forts at Chingleput, Fort St. David, and Fort St George.

Early in 1758, Mr. Call submitted a letter regarding Fort St. George. He names the several works as follows:—

The bastion lately built at north-west corner of town	The Royal Bastion.
Bastion north-east corner ...	The Demi Bastion.
Gate to be built between these bastions	The North Gate.

* Report of Committee of Secrecy, appointed November 4th, Appendix No. 4. Broom's *History of Rise and Progress of the Bengal Army*, p. 202.

Redoubts before this gate ...	North Redoubt.
Gate to the east	Sea Gate.
Redoubt before Sea Gate ...	Sea Gate Redoubt.
Bastion south-east corner ...	St. Thomas' Bastion.
Bastion south-west corner ...	The Nabob's Bastion.
Gate on south curtain	St. Thomas' Gate.
Earthen bastion, north of Nabob's Bastion	Lawrence Bastion.
Earthen bastion, south of Royal Bastion	Pigot's Bastion.
Gate in curtain between them ...	St. George's Gate.
The redoubts to be placed in front of gate	St. George's Redoubts.

Early in May, the Council having learned that the French had received great reinforcements, thought it necessary to provide, in the best manner possible, for the defence of Madras, and accordingly asked for Mr. Call's advice.

He recommended "redoubts in places of arms to north and west, as well as a lunette to south; that the ditch which now extended one-half the length of south curtain be carried entirely along, and round St. Thomas' Bastion; and a battery erected in south-east angle of covered-way, to defend and cover St. Thomas' Bastion."

The south part of the fort being the weakest, he argued that the works in that part should be first put in hand.

There were two cisterns in the fort—one under Nabob's Bastion, to hold 33,480 gallons, another under Charles' Bastion, to hold 23,532; total, 57,012 gallons. He estimated this to be one-ninth of what was necessary.

The water of several wells in the town he reported "drinkable, but cannot be depended upon." He thought it "necessary to make more cisterns, but there being now no time, the best thing to do is to fill all small tanks, casks, and jars that were in the place."

Later on (in November), he lined out two lunettes on the

glacis, to cover old south curtain and increase the fire from that part.

He proposed to secure Black Town, by constructing two dams in river to the west, one by the bound hedge, and the other near the Arrack Distillery, to keep back the water, and make an inundation over the country near the river.

"The defects of the bound hedge to be made good with caldera-bushes, and between each brick out-guard, a redoubt of palmyra trees to be raised; barricades to be made across the street."

CHAPTER II.

Siege of Fort St. David.—Its capture by the French.—Lally fails at Tanjore.—Siege of Madras.—Formation of European and Native Pioneers.—Preston marches to Arcot.—Engineers granted commissions.—Siege of Madras raised.—Colonel Lawrence takes Poonamallee and Tripassare.—He marches towards Conjeveram.—Brereton takes command.—Lawrence and Draper return to England.—Capture of Conjeveram.—Brereton attacks Wandewash.—Repulse of the English.—Coote takes command.—Capture of Wandewash.—Carangooly taken.—Defects of Wandewash.—Improvements of Fort St. George.—French attack Wandewash.—Coote defeats the French.—Death of Brereton.—Coote takes Chettipet.—Wood invests Arcot.—Capture of Arcot.—Coote attacks Waldour.—Siege of Karical by Monson.—Party of Pioneers take Chillumbrum.—Verdachellum surrendered.—Coote takes Villenoure and Waldour.—Coote superseded by Monson.—Monson wounded.—Coote re-assumes the command.—Siege of Pondicherry.—Great storm at Pondicherry.—St. Thomas' redoubt captured.—French capitulate.—Sufferings of French.—Ginjee invested.—Thiagar blockaded.—Pondicherry destroyed.—Mahé capitulates.—Ginjee taken.—The French lose every place in India.—Coote goes to Bengal.

In May 1758, the French proceeded under Mr. Lally to attack Fort St. David. On the 15th the French engineers erected a battery of two 24-pounders on the north bank of the river of Bandapollem.

"Fort St. David could not be attacked by regular approaches from the south, owing to the river, but on north and west the ground was rather advantageous to the enemy."

The body of the place was small, being only 150 yards west to east, and 100 yards north and south.

The bastions each mounted twelve guns. The outworks were a horn work to north with thirty-four guns, two large ravelins east and west, with a ditch all round which had a cuvette supplied from the river; scarp and counter-scarp were faced with brick; a broad covered way, palisaded with arrows at salient angles, commanding the glacis, and the glacis itself provided with well-constructed mines.

The ground to the north of the fort is sandy, with large hillocks here and there.

This ground was included by the sea, the rivers Ponniar and Tripapolore, and a canal joining them. On the edge of the canal, 1,800 yards north of the fort, stood an obsolete redoubt called Chuckly Point. 200 yards to right of this stood another redoubt on a sand-hill called Patcharee. 400 yards in rear of this was another much larger sand-hill called Thevanapatam; a fascine battery was raised on this hill. To the west of this hill there was a bridge over the canal, commanded by a gateway with a narrow rampart and battlements.

The garrison in Fort St. David consisted of 619 Europeans, of whom 286 were effective military, 83 pensioners, and 250 seamen (crews of *Triton* and *Bridgewater*) besides 1,600 natives.

On 15th May the French attacked the posts in the sand with three columns, the division on the right to attack the bridge near Thevanapatam, the centre was to attack Chuckly Point, and the left to cross the canal where it joins the Ponniar. The right division found the bridge destroyed, the centre could not find the expected ford, and they both therefore halted. The left division easily crossed near the Ponniar. The centre division learning this, marched and crossed at the same point, while the right division remained in front of the broken bridge. Chuckly and Patcharee Point were both attacked at the same time, and in half an hour carried. The two divisions then marched on the Thevanapatam battery.

After a spirited resistance of two hours the enemy got possession of it, and all the Europeans were made prisoners.

The French retired from the Thevanapatam Hill, but held the other two points.

On the 16th the enemy broke ground, and carried a trench from Chuckly to Patcharee; and by the 19th they had advanced to the Hill of Thevanapatam.

The next day they opened another trench from Thevanapatam to the bridge, and repaired the latter.

By this time only 200 of the sepoys remained in the garrison, The enemy worked on till the 26th, constructing four batteries and carrying on their trenches from Thevanapatam towards the north-east angle of the glacis. The fort continued all this time to lavish their fire. The enemy's fire up to this had merely consisted of five mortars to the west, but on the 26th a battery of seven guns opened. On the 27th some of the sailors broke into the treasury, procured some arrack and got very drunk.

By the 30th the enemy were within 200 yards of the glacis, and opened three other batteries, one of three guns with five mortars against north-west bastion, another of six guns and four mortars on Thevanapatam Hill, and the third of four guns 300 yards to the south-east of Thevanapatam, opposite the north-east bastion.

The north face was enfiladed by a battery on the west, and the defences on this side had already suffered so much—both from the enemy's shot and the shock of their own firing—that they could barely return the same number of guns.

Up to 1st June the fire still continued. The enemy carried their trenches to the foot of the glacis near the north-east bastion, where they began to erect a battery. All the embrasures in the fort commanding this point were ruined, and as the French squadron had arrived, and could land a large number of men and make an assault which the garrison were not in a position to resist, Major Polier and Mr. Wynch determined to hold a

Council of War, at which it was decided they must capitulate on the best terms obtainable.

On 2nd June a flag of truce was hoisted, terms were arranged, and at 6 P.M. the French Grenadiers were admitted into the fort. The garrison marched out and delivered up their arms and the ensigns to the French, and they were all marched to Pondicherry as prisoners. Lieutenant Hume appears to have been the chief engineer of the garrison. Fort St. David was by the French razed to the ground.

Immediately after the capture of Fort St. David the French took possession of Devicottah, the garrison having abandoned it on the approach of the enemy.

The French army returned to Pondicherry, and on the 7th Mr. Lally entered in triumph.

Mr. Lally, to secure money supplies marched to Tanjore to obtain payment of a bond for fifty-six lacs given by the Rajah to Chunda Sahib. He found it impossible to get what he required, and proceeded to attack Tanjore.

The English managed to cut off his supplies, and he was compelled to return to Pondicherry without effecting his object. He then determined to drive the English from Madras. On the 29th November the French army moved from Conjeveram, and in the afternoon of the 9th December 1758 appeared in sight of the Mount.

The English force under Lawrence retreated the next day from the Mount to Choultry Plain. The French advanced to Marmelon. Our army retreated to the Island, and our parties at St. Thomé and Egmore fell back on the main body.

The French army consisted of 3,000 Europeans, 500 Black Horse and 3,000 sepoys.

English, 1758 Europeans and 2,200 sepoys, besides 200 horse belonging to Nabob, and of little use.

On 14th December the French marched from Choultry Plain by Vepery to the north of Black Town, and by 8 A.M. were in full possession of it.

The following account is chiefly taken from the journal of the chief engineer, Captain John Call.

A sally was made from the fort under Colonel Draper with 500 men. He marched out at the West Gate over the old bridge which led into Pedda Naik's pettah. Major Brereton with 100 men guarded the passes by the old hospital to cover Colonel Draper's retreat.

Colonel Draper advanced with two field-pieces into the great street of the pettah, against the regiment of Lorraine with four field pieces.

The enemy were driven from their guns, and Colonel Draper and four Grenadiers advanced to take them, but our Grenadiers were shaken, and did not advance rapidly. Meantime, Colonel Draper learned that Lally's regiment was advancing in support; he thereupon retreated, and retired into the fort, bringing Count D'Estaing prisoner.

Meantime the engineers were engaged in making a dam in the "gut,"* to shut up the communication between the water in the river and the ditch, lest the enemy should cut the dam, which kept up the water some two feet, and thereby drain so much off.

15th December. The engineers were employed in making two batteries—one of three guns to cover the old north-east bastion, and another of four guns, on the glacis to the east, a little south of the southern flank of the same bastion, from the covered-way to the surf.

16th. A "black fellow" was hanged this evening at the foot of the glacis, as a spy.

A sally took place this night, but it was not successful.

17th. The Governor told the garrison that five days after the defeat or retreat of the enemy he would divide 50,000 rupees amongst them.

* An opening between the river and the ditch to the west of the Royal Bastion.

Between the 12th and the 18th no less than thirty-three deserters came over from the enemy.

In addition to Captain John Call, who was chief engineer, there were four assistants—

Captain Lieutenant Leigh, engineer ordinary.

Lieutenant Eiser, H.M.'s 64th Regiment, engineer extra-ordinary.

Lieutenant Stevenson, sub-engineer, and

Ensign Cotsford, practitioner engineer.

On the 19th, the enemy threw up two breast-works, one behind the other, near the sea-side to the north. It was supposed they intended to attack the north face of north-east Bastion, so it was resolved to strengthen the demi bastion.

One thousand sepoys were sent out to push through the enemy at Garden House, attack St. Thomé, and try to spike a large gun on the beach. The enemy made an unexpected opposition, and the sepoys retreated in disorder to the fort. It was thus seen that no dependence could be placed on the sepoys in attack.

On the 20th a new Mayor was selected. It was usual to salute him with nine guns, so nine were shotted on the Royal Bastion, pointed at the enemy, and discharged in his honour. All this night a warm fire was kept up from the Royal Bastion and north lunette on besiegers' trenches. At 10 P.M. a sally was made to spike a large gun in Triplicane, and another to spike guns on the island. Neither were successful, but the enemy was much annoyed by the attempts.

The artillery force of the garrison amounted to eleven non-commissioned officers, seventy-eight privates, and 155 lascars.

On the 23rd the Governor received intelligence of Colonel Forde having gained a complete victory over the French in the north Circars; the whole garrison were put under arms, marched into the covered-way, and having brought the enemy in alarm to the front, twenty-one guns were fired at them, and three running-fires from the covered-way.

By the 28th, part of the enemy's battery, near Sumput Row's house, was visible, also their barricade across the street in Pedda Naik's pettah, opposite the bridge. A brisk fire was kept up on these works, which seemed to be intended for a principal battery against the north-west face of Royal Bastion, and to enfilade the covered-way of north front.

Mr. Lally complained of our firing at his head-quarters, and threatened to burn Black Town. Captain Call remarks on this, "that he had no right to complain, because he is perhaps the first General that fixed his head-quarters within point blank shot of a fort, and lodged a regiment and ammunition at the same place."

The English working parties usually consisted of 100 Europeans and 200 to 300 sepoys.

Captain Preston and Usoff Cawn had a skirmish with the enemy on 30th December, with advantage on our side.

On the 31st, a sally was made to the south, with one company of Grenadiers, troops of Horse, and 1,000 sepoys; no opposition was met with.

Captain Preston was now at Trevembore, two miles south of St. Thomé, and proposed to make a large circle round the enemy, cut off their supplies, and endeavour to take Poonamallee and Tripassore.

On 2nd January the enemy began to fire from battery of six guns, north of old hospital, to enfilade the Royal Bastion, and batter west flank of the demi-bastion.

The English were able to oppose twelve pieces, and the French battery was soon silenced, and two of their guns knocked to pieces.

The French continued to throw shells into the town.

Five more deserters came in to-day.

On the 5th, the engineers erected a battery of five pieces on the covered-way before salient angle of the demi-baston, against the enemy's north battery.

On the 6th, the French opened fire in real earnest; the fire on the 2nd was merely intended to engage the garrison, while a force was detached to attack Captain Preston, south of St. Thomé.

They fired from Lally's battery near the sea with six guns and seven mortars, and from Lorraine's battery with seven guns and a howitzer. They had a mortar or two to the west. They threw 150 shells and 200 shot, but our fire appeared superior to theirs. Against Lally's battery we had ten guns, and against Lorraine eleven guns.

On the 7th, fire continued, and they opened another battery to the left of the burying-ground. The damage done by the enemy's fire was not great.

Captain Preston having been attacked at Trivembore, had been obliged to retreat in some disorder.

As soon as it was evident that the enemy were about to open fire, Captain Call, chief engineer, drew out the following instructions for his assistants:—

"It is ordered that Captain Lieutenant Leigh, engineer in ordinary, and Ensign Cotsford, practitioner engineer, do attend on the front, attached together, and Lieutenant Eiser, H.M.'s 64th, engineer extraordinary, and Lieutenant Stephenson, sub-engineer, do also attend together, and that these four gentlemen relieve each other every twenty-four hours, at the same time as the guard is relieved.

"That the senior engineer on duty every twenty-four hours do make a report to me if any very extraordinary occurrence happens; that he acquaint the senior engineer who relieves him with such observations as he has made while on duty, and with the nature of the work carrying on, and also reports to me, by writing, in general terms, what has been executed during his tour of duty.

"That the senior engineer going on duty every morning do attend the parade and receive the working-party, which he is to

distribute according to the orders he has received, or if he has none in particular, in such a manner as he thinks the service may require."

"That the senior engineer on duty, on application being made to him by any military or artillery officer for the repairing or security of any work, do give them all the assistance he can, and he is to take care that the parapets, embrasures, platforms, and the works in general are kept in the best condition possible.

"The master bricklayer and carpenter have orders to follow the directions of the engineers on duty, and give all the assistance they can in their branches."

On the night of the 7th the enemy ceased firing, but this proved merely a lull before the storm; for next day they began with a heavier fire, the damage done to the fort being greater than before.

"About 4 A.M. on the 7th, the garrison were surprised with the arrival of three boats with a Frenchman in each; they were the same which had been sent on the 3rd to Sadras with some English ladies. The French having seized that place captured the boats, and loading them with 150 shot of 24-prs., 100 empty cartridges, 50 steel caps, 50 barrels of powder, and 1,500 sand-bags, sent them back with a soldier in each to Black Town. The boat fellows towards the morning being opposite Madras, seized the arms of the sleeping soldiers, poured water on the locks, tied up the men, and landed the boats at our sea-gate."

On 8th January the damages to the works began to get more serious, and their repair of vast importance. The Chief engineer having found the soldiers unused to such duty, and extremely awkward in repairing the damaged works, recommended the establishment of a pioneer company composed of volunteers drawn from the several corps, who were to attend only to the repair of the works, so that by constantly employing the same people they might the more readily execute the required services.

The company consisted of six sergeants, six corporals, and eighty-eight privates commanded by Lieutenant Meyer assisted by Ensign West.

Two companies of sepoys were also formed with proper officers on the same plan.

The men of the European Pioneer Company were to receive half a rupee a day as extraordinary allowance.

To-day, a shell from the enemy fell on a house full of saltpetre and brimstone which took fire, and could not be put out for many hours.

The enemy were observed to be erecting works to the west and south by which the town would be fully invested, so it was resolved to effect a junction with Captain Preston. Preston was to march to the Mount from Wendalore on the 11th, and then to St. Thomé, by Trevembore, by daylight on the 12th. On the same morning a force of 400 Europeans and 1,000 sepoys with a troop of horse were to march, attack St. Thomé, and join Preston. By this means it was hoped that the country to the south might be kept open.

Up to 8th January the number of deserters from the French amounted to fifty.

On the 9th, a smart fire kept up on both sides all day, and there were two explosions in French batteries. Our parapets much damaged. A sentinel (lately deserted from the French) was tried for quitting his post and plundering; he was hanged.

10th.—The enemy carried a trench from Lally's battery 150 feet west, and thence a zig-zag south-east towards the sea; they also began a trench from near the new hospital towards Pettah bridge. Orders given to the engineers to set up a palisadoe within the lunette to the north round demi-bastion; to keep 1,000 sand-bags filled on each battery of front attacked; to keep water-tubs in each battery to wet sand-bags; to fill sand-bags with earth that falls from bastions into the dry

ditch; to erect a strong high traverse over steps leading up to Choultry Gate to prevent street being enfiladed; to erect another traverse to secure the sick in hospital, and to make a report to the Governor every evening before sunset of damage works have received, and number of men required for working party.

Owing to the misconduct of the cavalry with Captain Preston, he was unable to effect the proposed junction to south of Madras with a part of the garrison, and marched to Arcot to try to collect a better body of cavalry. The Governor, Mr. Pigot, heard of this movement on the 16th, but concealed it for fear of dispiriting the garrison.

The French continued to carry on the approaches.

On the 12th a sortie was made (as already arranged) to the south under Major Brereton; it was successful as far as it went and two guns were taken, but of course no junction was effected with Preston.

14th.—Enemy opened a battery of three mortars behind burying-ground. Three explosions took place in rear of Lally's battery.

18th.—Enemy fired from Lally's battery with fifteen guns, and from a work near the bar with two small guns.

19th.—Enemy by this time were advanced on our glacis, and beyond north-east salient angle by the seaside.

The Governor called a Council of War. At first it was determined to sally, but this was abandoned, as it appeared the enemy designed to attack.

20th.—Enemy advanced third zig-zag quite down to the sea. To the south a barbette battery was being constructed, and two large guns or mortars placed behind it.

Commissions were issued to the engineers as follows:—

John Call, sub-director—Captain, 1st January 1759.

Alex. Leigh, engineer-in-ordinary—Captain-Lieutenant, 15th January 1759.

Wm. Stevenson, sub-engineer—Lieutenant, 1st December 1758.

Ed. Cotsford, practitioner engineer—Ensign, 1st January 1759.

On the 21st a sally was made on the enemy's trenches by one officer and thirty men, and one officer and thirty pioneers. They entered the works, destroyed some of them, and returned with the loss of four men.

By this time the enemy had advanced their sap very near the salient angle, and had also opened a battery of three guns in their zig-zag to fire on right face of north ravelin, but this latter was badly constructed. One morning the besieged found a pole stuck in the ground at the foot of the glacis, at the head of which was a large board with the following notice pasted on it:—

"Grace aux deserteurs François qui rejoinderont leurs drapeaux, et part au butin."

Translation.—"Pardon and part of the plunder to the deserters from the French who will rejoin their colours."

This was taken down and the following put up in its stead:—

"Un tien vaut mieux que deux tu l'aura.

"Les deserteurs François trouvent l'argent Anglais plus comptant et leur traitement plus doux que les promesses vaines des François de leur part du butin sans paye, et conseillent leurs camerades de venir à Madras participer d'une meilleure fortune."

Translation.—"A bird in the hand is worth two in the bush."

"The deserters from the French find English money and English treatment of greater value than French promises of plunder without pay, and invite their comrades to come and better their fortunes."

The enemy on 24th January attempted to push their gabions close to covered way, but many were overset by our men; they, however, carried on their approaches from ridge of the glacis on

north-east salient angle, almost parallel to north face of covered way. On the 30th but little advance had been made by the enemy, and it was supposed that they were erecting a battery on east or north face of covered way. The *Shaftesbury* arrived at Madras, and the Captain informed the Governor that he left Bombay on 18th December in company with six vessels containing six companies of Colonel Draper's regiment, and that they might be expected at any time.

On the next day a constant fire was kept up, and every half-hour hand-grenades were thrown into the enemy's trenches. Enemy opened four embrasures in the battery on crest of glacis before the face of the demi-bastion. The French frigate attacked the *Shaftesbury* and did her much harm.

Our fire from the fort still appears to have been superior to that of the French.

On 4th February, a gallery under west counterscarp having been advanced, about eighty feet fell in at the end, and light came through, but the miners stopped the hole so soon that it is believed the enemy did not discover it.

The engineers directed the gallery to be filled five or six feet back, and the return for the chamber to be made at once.

5th.—No apparent alteration in enemy's works. Usoff Cawn arrived at the Mount. Captain Vasserot sent out to join him with a few troops and money, also a gold watch for Abdul Wahab, and an amethyst ring set with diamonds for Usoff Cawn.

From the 6th to 12th the enemy continued to fire from about ten guns and two mortars, but they do not appear to have worked either at the batteries or approaches.

On the 9th an action took place at the Mount between the English, under Major Caillaud, and the French. The French attacked with 600 Europeans, all their cavalry, and a large body of sepoys with seven or eight pieces of cannon. After twelve hours' efforts to dislodge the English, they retreated about

sunset, while the English had to move to Vandalore for ammunition.

On the 13th the enemy made an attempt to seize our fascine battery, but they were repulsed. The same night they advanced a gabionade thirty feet in front of stockade under cover of the bank of the glacis, and formed a traverse with a direct communication behind it to the stockade. This work was discovered about 9 P.M., and a fire of musketry, round and grape-shot kept on it all night. In the morning the guards of the demi-place of arms and the fascine battery sallied out and destroyed it.

The enemy fired Chepauk this day.

15th.—The enemy attempted last night to replace the work destroyed, but were prevented by a brisk fire which was kept up all night.

16th.—Enemy were very silent last night, but we kept up a smart fire on the head of their sap from the fascine battery.

The engineers laid a platform for a 12-pounder very close to the surf, and a gun was put ready for service. Crows' feet were strewed on top of glacis near fascine battery, and several planks with nails driven through, laid on the sand to prevent approach.

Six sail approached Madras, and were found to be our long-expected succours. About 8 P.M. they anchored in the roads and were found to be *Queensborough*, 20; *Revenge*, 20; *Winchelsea*; *Prince of Wales*; and *Britannia*, with six companies of Colonel Draper's regiment, Major Monson in command. As many troops as possible were landed at once.

We learned that the French had abandoned St. Thomé, and that they intended to raise the siege and march off before daybreak. Major Caillaud had already received directions to harass the French during their march.

On the 17th, at daybreak, found that the enemy had abandoned their works, and were retreating; at 9 they blew up Egmore Powder Mills.

The following is the account given by the chief engineer of the enemy's works:—

"The construction and position of the battery on crest of glacis ill-contrived. Seven guns found on it; carriages all disabled."

"Lally's battery had fifteen embrasures, three firing on ravelin, and twelve on demi- and north-east bastions; six guns on carriages, of which all but one considerably damaged; five guns with carriages, dismounted. Six mortars behind this battery had been fired for some time."

"The battery to the left of burying-ground had four embrasures to enfilade right face of north ravelin and covered-way before it; three guns on carriages, muzzles damaged; six guns dismounted, and three carriages ruined."

"No guns were found in Lorraine battery; the good guns had been drawn off, and remainder buried."

"In all the batteries the platforms were very bad; instead of having sleepers and planks, they had merely a few pieces of wood taken from the roofs of houses. Their gabions were bad, and their fascines not much better."

The number of guns found in the enemy's works were fifty-two:—

33 18 and 24-pounders and
19 9-pounders.

Many thousand shot and 150 barrels of powder at St. Thomé; also forty-four sick and wounded soldiers.

The French retreated so precipitately that they had no time to burn Black Town.

The Company's garden houses and houses belonging to European inhabitants suffered severely, the walls of some alone being left.

Our loss in the siege was:—

Commissioned officers:

Killed	15	
Wounded	14	
	—	29

Non-commissioned officers and soldiers :

Killed	257	
Wounded	182	
Taken prisoners...	122	
Deserted...	20	
		581
Europeans, total		610

Sepoy officers and privates :

Killed	105	
Wounded	217	
Deserted...	440	
		762
Grand total		1,372

Totals :

Killed	377	
Wounded	413	
Taken prisoners...	122	
		912
Deserted		460
		1,372

Enemy's Loss.

Europeans killed and wounded, 90 officers and 1,410 men.

The ammunition expended by the garrison during the siege was very large.

18,309	round shot.
1,366	grape shot.
6,702	shells.
1,990	hand grenades.
522	match chains.
330	fire balls.
29,219	

and 176,798 lbs. of powder; the quantity remaining being only 66,802 lbs.

"Thus terminated the siege of Fort St. George after the garrison had been shut up sixty-seven days, and the enemy's batteries had been open forty-six."

"To the credit of our artillery let it be remarked that two 12-pounders from the north ravelin dismounted four 24-pounders opposite to them, and that of fifty-two pieces of cannon found on the enemy's batteries, thirty-one were disabled by our shot, which are many more than we had hurt by the enemy, notwithstanding our works were enfiladed, plunged into and taken in reverse. I must also mention that the works by the exertions of a few men were kept in extraordinary good repair, and three guns with stout parapet were maintained on the north-east bastion from the first to the last day of the siege. An addition was also made of a battery by the seaside, and two pieces more were fired on the 16th February than on the 14th December. Nor must I forget to observe that a few raw men taken from the Pioneer Company greatly outdid the boasted miners of the French, who were to blow whole bastions into the air; for after the breaching battery was erected, those men, without having seen anything of the kind before, and without any previous preparations of stantions or tools, were set to open the counterscarp, and by continued hard labour carried a gallery ninety-five feet in length under the enemy's battery, where two chambers were made and loaded with 250 lbs of powder each."

"This work was executed within a few feet of the enemy, and in sight of their lodgment on the glacis."

"They saw and dreaded, but could not interrupt it, though we lost many men."

"Whoever considers the nature of the soil, and that the gallery was carried on under the explosions of the enemy's guns, which every day made the earth to fall in, must allow this to have been a most laborious and hazardous undertaking."

The above remarks have been extracted from the journal of the chief engineer, Captain John Call.

34

References to the Plan of the Siege.

C *Six 13-inch mortars, which played on the 5th of January 1759, in the morning.*

D *A battery of 3 guns, opened on the 2nd of January.*

E *A battery of 4 guns and 2 howitzers, opened on the 6th of January, in the morning.*

F *A battery of 4 guns, opened on the 7th.*

G *A battery of 4 guns, which played "en ricochet," opened on the 11th of January.*

H *A battery of 4 guns, opened on the 23rd of January against the north ravelin.*

I *A battery of 5 guns, intended to breach the demi-bastion and destroy the blind and north-east, opened on the 31st of January, in the morning.*

K *Mortar batteries of the enemy.*

L *Retrenchments, or barricadoes.*

M *A fougasse, sprung by the enemy on the 3rd of February, in the morning.*

N *The last attempt of the enemy to advance by traverses, 14th of February.*

O *A battery of 2 guns, which fired into the town on the south side and at the Shaftsbury.*

P *The royal bastion.*

Q *The north-east bastion.*

R *The north ravelin.*

S *The demi-bastion.*

T *The fascine battery.*

V *The blind before the north-east bastion.*

Directly the siege was over, the chief engineer turned his attention to the state of Fort St. George.

The enemy's works were first destroyed, and then the necessary repairs to the fort were undertaken. The chief engineer, besides this, sent in a projeet for strengthening the sea-face.

The levelling of the enemy's works was undertaken by the remains of the Pioneer Company, and in a fortnight the work was done. As the English had suffered great inconvenience from the tombs at the burying-ground during the siege, the chief engineer recommended their removal, and this was at once done. Colonel Lawrence and Major Brereton each applied for a plan of the fort and the French attack, that they might explain to the Ministry and the Captain General the nature of our defence.

It was found impracticable to take the field till the beginning of March. Colonel Lawrence, after taking Poonamallee and Tripassore, marched towards Conjeveram, but he could not get the enemy to stir, and as he was in a bad state of health, he quitted Madras and returned to England, leaving the command to Major Brereton, Colonel Draper having been compelled to leave the country on account of his health.

Major Brereton marched to Wandewash, and opened ground before it. The French marched to relieve it, and came within eight or nine miles of our army. Major Brereton thinking their position too strong, did not attack, but made a forced march, and entered Conjeveram.

It was garrisoned by 500 black troops, under Mustapha Beg. He fought well, but was killed with the greatest part of his followers. The English suffered severely, and lost four officers.

Major Monson, as he was reconnoitring, received a wound from a ball, which entered near his ear, passed through his cheek, and came out near his nose. The narrator of this incident quaintly remarks, "but he never found any great inconvenience from it." Majors Brereton and Caillaud were also wounded.

We remained at Conjeveram for a month, while Mr. Lally was at Cauverypauk. On 6th May the French marched towards Conjeveram; at the same time Brereton advanced, but the latter, finding that his Europeans were suffering heavily from the excessive heat, resolved to return to Conjeveram. In a march of eight miles, six Europeans fell dead, and ninety were taken ill.

The French advanced within three miles of Conjeveram. Major Brereton being ill, Major Monson took command; he avoided a general action, but was successful in several skirmishes. Finally, Mr. Lally marched to Trivatore,* sent his army into cantonments, and went himself to Pondicherry.

On 29th August, Major Brereton, commanding the army, held a Council of War (Majors Monson and Calliaud), and it was agreed that the army was in a position to take the field.

Up to this time the chief engineer had remained at Madras, superintending the repairs and improvements to Fort St. George. Messrs. Leigh, Stevenson, and Cotsford, were with the army. Major Brereton proposed to take Wandewash, and asked for Call's services.

Call was directed accordingly to join the army, but about the middle of September he was ordered to return to Madras, as his presence was not immediately wanted with the army, owing to the arrival of the French fleet.

On 25th September, Major Brereton determined to attack Wandewash, and in a letter to the Council (apparently in answer to one of theirs, counselling prudence) he says:—"Nothing but the being convinced that now is the time for action, or never, could carry me on after the receipt of your letter; if we succeed 'tis well, if not, I shall hang myself."

The army moved on 26th September, and took Trivatore. On the 30th, Brereton made an assault on Wandewash. The

* On Cheear river, ten miles north-west of Wandewash.

English were repulsed with a loss of twelve officers and 195 men killed and wounded. The French lost about 200 also.

The English again returned to Conjeveram.

On 30th October, Colonel Coote took command, but did not arrive at Conjeveram till 20th November, when he appointed—

Major Monson ...	Quartermaster-General.
Captain T. Adams Captain William Ingram	Aides-de-Camp.
Lieutenant Eiser, acting engineer at Fort St. George ...	Brigade Major.
Lieutenant Rowland ...	Secretary.

Immediately after Coote took command, he ordered Captain Call to camp, but the Council objected, and stated that Messrs. Leigh, Stevenson and Cotsford were with the army. The army marched from Conjeveram on 25th November, and on the 26th a detachment, under Major Brereton, invested Wandewash. Two batteries were erected as soon as possible, and opened fire on the 29th. On the 30th a breach was made, and the place was surrendered. A garrison was placed in Wandewash, the engineer being Lieutenant Cotsford. From Wandewash, Coote marched to Carangooly; this was taken on 8th December.

Coote left Lieutenant Fletcher and two companies of sepoys at Carangooly, with an engineer (Lieutenant Stevenson) and fifty pioneers to repair the fort.

A few days after the capture of Carangooly, the chief engineer was ordered to proceed to Wandewash and Carangooly, to survey them, and give his opinion on placing them in a state of defence by the end of December. Captain Call finished his work there, and on the 3rd January 1760 sent in his report.

He examined Chingleput as well as the two posts mentioned, and reported that "the south face of that fort had been so

judiciously altered as to have become very strong." He offered some proposals for making the north face equally so, and stated his opinion that "Chingleput was of the utmost consequence to Madras, as protecting thirty-five miles of intermediate country, and being almost an invincible obstacle to the French in any designs they might have on Madras."

As regards Carangooly, he pronounced the fortifications defective; he thought it better to hold it in its present state as long as we held Wandewash, but hardly thought it necessary to hold it if we were to lose Wandewash. In that case it should be destroyed, and preparations were made accordingly. He did not think Wandewash strong, but was of opinion that it was of the utmost consequence to us, on account of its situation, which is only twenty-five miles from Ginjee, and about the same distance from Chingleput; also useful as contributing to make easy an attempt on Chettipet, the capture of which place would cut communication between Arcot and Pondicherry, and render the siege of the latter place much easier.

By means of Wandewash and Chettipet it would not be difficult to open a communication with Trichinopoly, and our possessions round Madras would take a very compact form.

He considered the defects of Wandewash to be the want of a wet ditch, insufficient cover to walls against distant batteries, and inefficient flank fire. He made a number of proposals for improving the strength of the fort. Amongst others, improvements to ditch, a glacis, a counter-guard before the south-east tower, a ravelin on the east front, and the projection on the west front to be turned into a bastion, removal of two cavaliers; on the north he reported the ditch good and the country open. Ramparts to be raised. Magazines, &c., good.

If these proposals were carried out, Wandewash might be reckoned a strong place.

Mr. Cotsford, the engineer at Wandewash, was ordered to increase the flank fire.

Captain Sherlock, the officer commanding, received from Captain Call instructions as to the defence he should make in case the French attempted to re-capture the place.

Captain Call, owing to the late successes, thought it a desirable time to improve Fort St. George, and recommended a redoubt on north-east salient angle of covered-way, and the east face (sea-face) to be strengthened.

The works of the fort had chiefly up to this time been of earth. Captain Call considered that, owing to the defenceless state of Madras at the time, it was necessary to form them of earth, but hoped never to be under the necessity of raising earthworks again. He mentioned that, since 1752, 2,87,570 pagodas* had been spent on works of Fort St. George, and filling up the river; and all other charges bring the whole to 5,09,030 pagodas. He thought before it was properly finished the cost would be doubled.

The Council ordered that 200 bricklayers and 150 carpenters should be employed on the works at once.

In January 1760, Lieutenant Stevenson was at Carangooly, Ensign Cotsford at Wandewash, and Captain Lieutenant Leigh with the army, Captain Call being in Madras.

After the Capture of Carangooly, Coote posted his army in a strong position between Cauverypauk and Arcot. He had 2,100 Europeans, 4,000 sepoys, and 1,500 horse. The French under Lally moved from Arcot by the road of Wandewash, and sent a party to Coujeveram, who ransacked the town, but could not get possession of the fort. Coote marched to Coujeveram; upon this, the enemy retired and joined their main body at Patangel on the road from Coujeveram to Wandewash.

On 16th January the French attacked the pettah, and after a stout resistance lodged themselves, and commenced to erect a battery.

* Three and a half rupees.

On the 20th they commenced to fire (Captain Sherlock commanded; engineer, Lieutenant Cotsford) from one 24-pounder and three 18-pounders.

Coote now determined to relieve Wandewash, and took post at Ootumaloor on the 17th, and hearing from Captain Sherlock that the breach might be practicable on the 22nd, resolved to made an effort to raise the siege that morning. The army marched at 6 A.M. on 22nd January, engaged the enemy, and utterly defeated them. The English were left entire masters of the field, together with all the French artillery, except three small pieces; twenty pieces of cannon were taken. Three 20-pounders, one 24-pounder, and one 32-pounder. Captain Lieutenant Leigh was the only engineer with Coote's army.

The French had 200 killed and 600 wounded.

We took 240 prisoners, of whom 200 were wounded.

Our loss was 52 Europeans killed and 140 wounded, some of whom afterwards died of their wounds; among them Major Brereton.

The French retreated as fast as possible to Chettipet, eighteen miles distant, and next day assembled the remains of their broken army at Ginjee.

On 28th January Coote marched to Chettipet and began to erect batteries. Next day a breach was made and the place was surrendered.

Captain Wood, by order of Coote, invested Arcot soon after the battle of Wandewash.

On 2nd February he was joined by Coote, who at once erected batteries against the fort. Two of 18-pounders against the curtain between the north-west corner tower and gateway; one, of two 18-pounders and one 24-pounder, against tower and curtain west of south-west corner tower; and one of 12-pounders against north gate and to enfilade west front. Batteries opened on 5th February. On the 8th, Coote had carried his approaches to the south-west within 260 yards of crest of glacis, those to west within 250,

and summoned the garrison. The commandant said if he was not relieved in six days he would deliver up the fort on being allowed honours of war. Hostilities recommenced; and the approaches were carried on to within sixty yards of crest of glacis when the garrison surrendered on 10th February, and Coote took possession of Nabob's capital, and captured eleven European officers and 236 European soldiers. Rear-Admiral Cornish arrived at Madras with six ships on 28th February, and as the French had no fleet, he at once co-operated with the land forces.

The garrisons of Permacoil and Alumparva* having surrendered prisoners of war, Coote proceeded with the army to attack Waldour and blockade Pondicherry by land. At the same time Major Monson, with the chief engineer (Call), seven gunners and fifty pioneers, embarked on board the fleet to begin the siege of Karical with the assistance of the Marines. They were joined by 40 Artillery, 100 Europeans, and 200 sepoys from Trichinopoly. The fleet arrived in the Karical roads on 28th March, and at 5 P.M. Major Monson landed, with the pioneers and 300 Marines, four miles north of Karical. Next morning they seized the town. Captain Call, with the pioneers, took possession of a saluting battery near the mouth of the river; while doing so they were fired on fiercely from the fort. In the night the pioneers made a battery near the river on esplanade. Next evening a 10-inch mortar was landed, and at 10 P.M. began to bombard Fort Dauphin.

The enemy abandoned Fort Dauphin and retired to Fort St. Louis. By 1st April the English had finished a battery of four 18-pounders. On the 3rd they fully invested the place; by the 5th they had erected several batteries, breached one bastion, and dismounted several guns. Major Monson now learnt that Lally had sent troops within twenty miles, so he summoned the garrison, and the place was given up. 206 Euro-

* Seventeen miles north by west and twenty-five north by east of Pondicherry.

peans, including officers, were taken prisoners, and 200 sepoys. Major Monson next marched to Chillumbrum, and summoned the garrison, who seemed determined to hold out. In the night a party of pioneers were carrying fascines to a battery, mistook their way, and marched right up to the fort. The French thought they were coming to escalade the place, and cried out that they surrendered at discretion. Prisoners taken were forty Europeans with six officers, and 300 sepoys.

Verdachellum surrendered soon after, and Major Monson in the beginning of May joined Coote.

Towards the end of April the chief engineer was directed to return to Madras; and Captain Leigh received orders to remain at Karical, to construct the mines and to destroy the fort as soon as it was resolved on. In March, the engineer at Wandewash was told to proceed with the strengthening of the fort in accordance with Captain Call's suggestions. In this month mention is made of another engineer, a Mr. MacMahon, doing duty with Colonel Coote's army.

Lieutenant Stevenson was appointed engineer at Allumparva, and in June requested to be allowed to leave the engineers and enter the military; but permission was refused, as his services were urgently required as an engineer.

He was employed by Coote in the destruction of Allumparva, as also in preparing plans of Wandewash, Karical, Chellumbrum and Verdachellum.

Captain Leigh was employed at Karical, but on 18th August was ordered to Trichinopoly, to report on the works necessary at that place. On 5th October he left Karical, reached Trichinopoly on the 8th, and sent in a lengthy report on the fort with extensive proposals for strengthening it.

The Board, however, did not think it expedient at the present juncture to make any additions and alterations to the fort, especially as an engineer could not be spared to superintend the works, and Captain Leigh was told simply to repair the

breach made by late rains, return to Karical to comply with previous instructions regarding that fort.

On 7th November, Leigh was ordered to destroy Fort Dauphin, and after that was effected, he, with the pioneers, European artificers, and pioneer lascars, were to repair to camp.

On 8th September, John Call, the chief engineer, attended the Board in Madras, and the oath of secrecy being administered to him, took his seat at the Board.*

Meanwhile, Coote having taken Villenoure and Waldour encamped in front of Villenoure, with his left on descent of Red Hills, four miles from Pondicherry and one mile and a half from Oullagerry where the enemy were still posted. He threw up redoubts in the different avenues, as also did the enemy, and the advanced parties were within musket-shot of each other.

During this time the French made three attempts on Cuddalore. In the first they carried off seventy Marines, but the two last were repulsed with loss. The rainy season approaching, Colonel Coote requested the Admiral to land Marines to take Ariancopang. They landed at Cuddalore on 29th August, and 800 men, under Major Monson, were disposed for the attack of Ariancopang, while Coote with the main army marched on Oulagerry. Monson, however, did not approve of the operation, so Coote countermanded it.

M. Lally, at 4 A.M. on 3rd September, made four attacks once on our advanced redoubts.

One on the Tamarind redoubt, erected on 29th August o Red Hill, about 4000 yards north west of Pondicherry; the on the redoubt at the end of the Waldour avenue from th rt; the third on the redoubts on the Villenoure and agerry avenues.

* A few days after, orders were given that, as the duty of the engineers in camp were very fatiguing, and not to be performed without horses, they were to receive allowance for a horse as an adjutant.

The fourth was to cross the river from Ariancopang and advance to the villages near the Villenoure Fort. All failed except that on the Waldour avenue redoubt.

The next night an attack was made again on Tamarind redoubt, but the enemy was repulsed with loss.

After this, Coote was superseded by Monson; the former went to Madras and Monson took command.

On the 9th, Monson ordered the whole army to attack the French posts at Oulagerry Church and redoubts in the bound hedge. The attack was successful, and the enemy abandoned three redoubts and left behind them fifteen pieces of cannon; but the great advantages proposed by this success were unfortunately lost, for Colonel Monson in the attack received a shot which broke his leg, and the Commander-in-Chief being disabled, the troops contented themselves with taking post in the bound hedge.

The next day the whole army encamped at Oullagerry and proceeded to fortify the redoubts they had taken; a detachment was sent to invest Ariancopang, the French withdrew the garrison and blew up part of the fort, which the English soon repaired, and established a post there.

Colonel Coote was now requested to re-assume the command, and he reached the camp on 20th September 1760.

In the beginning of October, finding the French were engthening the works to the north, he attacked them and possession of a redoubt they were fortifying; a party of ers at once set to work to close the gorge and make it e.

n MacMahon* commanded the pioneers on this occasion. He been ordered to call at Major Smith's post for a detachment of Europeans, but mistaking his orders neglected to do so; at midnight the pioneers were suddenly attacked by 400 Europeans and 600 sepoys. The Ensign (a Dane) who commanded the sepoys in the redoubt abandoned it on the first onset. Ensign MacMahon was killed, and the pioneers, sur-

prised and defenceless, escaped as they could. The sepoys were encouraged by a Subahdar named Cowen Naig; he formed them in the plain and returned to recover the post, in which he effectually succeeded.

On 6th October, the monsoon approaching, the whole line struck their tents, and encamped a mile and a half from their old ground on the hills.

While the monsoon continued, Coote, knowing that the works he might make would be destroyed by the rains, confined himself to cutting off all communications between the garrison and the country. Meantime, Major Preston was engaged in blockading Ginjee and intercepting convoys which they continually attempted to send for the relief of Pondicherry.

On 11th November, the chief engineer suggested that, as it would soon be necessary to begin the siege of Pondicherry, he should go to the camp in order to determine against which front the attack should be made. A week after he arrived at camp.

On the 27th, M. Lally turned the natives out of the town (except those absolutely necessary), to the number of 1,400 of both sexes and every age.

They were not allowed to pass through the English lines for a week, but at last Coote, finding Lally inflexible, allowed them to go—their only sustenance, in addition to what they had brought out, had been for eight days the roots of grass picked up in the fields.

Four ricochet batteries were finished on the 8th: one was near the beach with four 18-pounders, and enfiladed the sea-face; the second, of two 24-pounders, two 18-pounders, with three mortars of 13-inch, 10-inch, and 8-inch, was on the other side of the swamp, 140 yards from the walls, and bore on the west flank of the north-west bastion, which mounted ten guns, and had a strong counter-guard in front with twenty-five guns.

The third and fourth batteries were to the south: the third on

the edge of a large island, called Cocoanut Island (formed by the river), and mounted two guns; the fourth was raised on a smaller one, called Sand Island, and bore on St Thomas' redoubt, and on curtain between the two bastions nearest to the sea.

These four batteries were only intended to harass the enemy.

They opened at midnight on 8th December, and the firing continued for six days, but diminished after that for want of powder.

On the 20th, more powder arrived, and the enfilade and bombardment recommenced from all the batteries.

On the first day of the year 1761 a sudden storm of wind put the whole English fleet into extreme danger and destroyed several vessels.

The *Newcastle*, *Queensborough*, and *Protector* fire-ships were driven ashore two miles south of Pondicherry, and the *Duke of Aquitaine*, *Sunderland*, and *Duke*, store-ships, went to the bottom. 1,100 Europeans perished in these vessels. Several of the other ships suffered heavily, but the *Norfolk*, Admiral Steven's flag-ship, received little damage, and the Admiral soon returned to his station.

After the storm, every exertion was made to restore our works. The two batteries of Cocoanut and Sand Islands were ruined. As these could not readily be restored, owing to river flood, Coote determined to surprise St. Thomas' redoubt.

On 5th January the river had sufficiently fallen, and the detachment for attack assembled at the Ariancopang redoubt north of Cocoanut Island, and the other side of the river.

The English got possession of the redoubt by stratagem, and immediately after, Captain Call, the chief engineer, followed by the Pioneer Company, of fifty men (European), and five lascars, carrying gabions, fascines, and tools, set to work to close and retrench the gorge. By 4 A.M. the work was finished, and the

workmen withdrawn at 5. The redoubt was attacked by the garrison and retaken. A redoubt was commenced on the spit of land 300 yards in rear of the former.

By the morning of 10th January, the Hanover Battery was completed, and opened fire from ten guns, six 24-pounders and four 18-pounders, with three mortars.

The guns on the left fired on the west face of the north-west bastion, and the counter-guard before it. Two guns on the next bastion on the left, and two guns on the projecting towers on each side of Waldour gate. The redoubt on the spit of land to the south was finished on the 12th, and on the night of the 13th the trenches were commenced. Working parties, 700 Europeans, rank and file, 400 lascars, the Pioneer Company of 70 Europeans and 200 coolies.

Ground was opened near the bleaching ground, and the trench was carried on obliquely for 480 yards, passing the high road leading from Madras gate, and then continued 280 yards parallel to walls of town. Two short trenches from each end of this parallel were dug, and fell in with two ends of the intended battery, which was forty yards in front. All this work, 800 yards long, sheltered by gabions, fascines, and sand-bags, was executed by the European soldiers. The lascars and coolies were employed in bringing materials, and the pioneers were employed in the battery.

Before morning six embrasures were finished, and the cannon had been brought from the Artillery Park to the battery. The battery was 150 yards from the walls.

There was no time to lay the platforms, and it was expected the garrison would fire hotly on the work in the daytime.

They, however, only fired now and then, and the chief engineer, John Call, observing this, sent carpenters to lay the platforms.

The Hanover battery fired all day with great vivacity, and silenced all the guns opposed to it.

On the 14th night the pioneers, with 300 lascars, went again to work in the Royal battery, and the garrison having kept up a smart fire, wounded twelve men. Before daylight, however, the battery was finished.

It contained eleven 24-pounders and three heavy mortars. It opened fire on the 15th morning, and supported by the Hanover battery with ten guns and three mortars, soon silenced all the defences which bore on it, except a gun or two on the bastion near the sea. On the night of the 15th another battery of six guns was about to be commenced, 300 yards nearer the beach, and 150 nearer to the walls, to destroy the flanks of the various bastions. At sun-set, however, a flag of truce was seen advancing in the Villenoure avenue to offer capitulation.

The next morning, the 16th January, Villenoure gate was taken possession of. The French, amounting to 1,100, all wore the face of famine, fatigue, or disease.

On the 17th, the English flag was hoisted, and a salute of 1,000 guns fired.

Five hundred pieces of cannon and 110 mortars and howitzers were taken, and ammunition, arms, and stores, in great abundance.

Colonel Coote detached eight companies of sepoys under Captain Smith to invest Ginjee, and the blockade of Thiagar was continued by Major Preston.

The engineers present at the siege of Pondicherry were:—John Call, chief engineer; Alexander Leigh (having completed the demolition of Fort Dauphin at Karical went to Pondicherry on the 5th December). William Stevenson and Edward Cotsford, although not mentioned in the records, must have been present, as on the 23rd February they sailed with Admiral Stevens to assist in the attack on Mahé.

Captain John Brohier, who was the Engineer-in-Chief, appears all this time to have remained at Fort William.

He was dismissed about July 1760. I have been unable

to ascertain the reason of his dismissal,* but the result was that John Call was appointed engineer-in-chief and Major, 31st July 1760; Alexander Leigh, sub-director and Captain, 18th November 1760; William Stevenson, engineer ordinary and Captain-Lieutenant, 18th November 1760; Edward Cotsford, sub-engineer and Lieutenant, 18th November 1760.

Major John Call was directed, a few days after the surrender, to destroy the fortifications of Pondicherry. He remained there engaged upon this work with his three assistants till the departure of the expedition to Mahé.

Captain-Lieutenant Stevenson and Lieutenant Cotsford accompanied the expedition to Mahé, while Captain Leigh was left at Pondicherry to complete the work commenced by Major Call.

In the five or six weeks which elapsed between the surrender of Pondicherry and the departure of the expedition, the west front was blown up, as also parts of the north and south fronts; the mines in the town wall were nearly completed, except those on sea-face. The mines under the citadel had also been commenced. The circumference of the fort, exclusive of the citadel, was four miles in brickwork, yet Major Call hoped all would be finished in three months.

Admiral Stevens sailed on the 23rd February with eleven ships of the line and two frigates.

Major Moore, of H.M.'s 79th Regiment, commanded the military expedition, and, in addition to Stevenson and Cotsford of the Engineers, Ensign Ware, of the Pioneers, went with two sergeants, four corporals, thirty pioneers, three artificers, and forty lascars. Their services were, however, not required at Mahé, as, on the 13th February, it capitulated to Major Hector Munro.

Early in February 1761, Captain Smith took the mountain of

* Probably due to the badness of the masonry constructed at Fort William which had (as already noticed) to be for the most part rebuilt.

St. George at Ginjee, and the same day Thiagar capitulated to Major Preston, after a blockade and bombardment of sixty-five days.

On 5th April the Commandant of the Great Mountain of Ginjee capitulated, and thus the hostilities between the French and English terminated, with the result that the French had not a single "place" in India—their factories at Surat and Calicut being mere trading settlements.

Colonel Coote embarked on the 13th March for Bengal, leaving his regiment to follow.

Major John Call, on his return to Madras, was engaged on the fortifications of Fort St. George, which it was considered desirable should be made permanent as soon as possible.

Captain Leigh was directed to demolish the Fort of Waldour, as soon as he had finished with Pondicherry.

CHAPTER III.

Siege of Vellore.—Pioneer company raised under Captain Bonjour.—Expedition against Manilla.—Captain Stevenson.—Murder of Lieutenant Fryer.—Capture of Manilla.—Passes leading into the Carnatic.

In 1761 it was found that the Nabob of the Carnatic was unable to recover his dues from his tributaries, and the Council at Madras resolved on 24th August to assist him. This they proposed to do first by attacking Vellore.

Colonel John Cailland was appointed to command the Army, while Messrs. Bourchier and Du Pré were to accompany it as Field Deputies.

Messrs. Stevenson and Cotsford of the Engineers, who were now at Tellicherry, were ordered to return, with the view of being present at the proposed siege. After the capture of Pondicherry, it will be remembered, they accompanied the expedition to Mahé, a few miles south of Tellicherry.

On 28th September, Cailland encamped before Vellore, and waited for stores. Lengthy negotiations with the Killadar followed. Mortiz-Ali-Khan (the Killadar) offered his only daughter in marriage with the Nabob's eldest son, but no settlement was effected, and, after considerable delay, the Killadar returned to his fort on 12th October, having refused the terms

offered by the Nabob; and next day our batteries opened fire at a distance of 400 yards.

On the night of the 11th we had begun to erect our batteries. One of four guns and a howitzer, to enfilade the front, attacked (south face); one of four 24-pounders, to batter in breach; and a third, a little to the right of that, of two 24-pounders, to ruin defences. Besides these, there was a battery of three mortars.

On the 13th night we broke ground, carried on trenches for 150 toises, and constructed two parallels; the next day we pushed our trenches by sap close to the edge of the counter-scarp.

Finding we were battering a stone cavalier, it was determined to construct a battery of two 24-pounders on the edge of the counter-scarp, and to batter a little more to the right.

This battery was opened on the 15th morning with great success, and we succeeded in breaching a hole "through and through." On the 16th night we repaired embrasures, and made a sap to the ditch in order to fill it.

On this night we had two officers and twenty men wounded, besides some "blacks." The Killadar's family, trying to escape from the fort, were captured.

From the 17th to the 20th we were engaged in carrying a descent into the ditch, extending parallels to the left, and making a breach so low as to perceive another wall, an old gateway having formerly existed there.

On the 22nd the pettah was stormed and captured, after a little resistance. The great obstacle to the capture of the fort was found to be the breadth and depth of the ditch. A successful attempt was made to partially drain it. On 17th November the water in it had been lowered one foot, and water continued to run off.

On 16th November, Caillaud "had the misfortune to lose that valuable man, Captain Leigh, of the Engineers, who was killed by a musket shot." At this time Leigh was the only engineer

officer present, and Major Barker offered his services to carry on the works. It was now, more than ever, necessary that Stevenson and Cotsford should be present, and the Chief and Council of Tellicherry were asked to send them overland. They arrived in camp about 10th December, but by what route they came is not known.

Meantime, the gallery over the ditch, having been formed by us, was destroyed by the enemy, and our army was greatly in want of stores. Call was, in the absence of other engineers, sent to Vellore on 4th December, and on the same day the Killadar expressed his anxiety to treat for peace, but the attack was in no way relaxed. On the 11th the Killadar determined to give up the fort to the Nabob. Vakeels were accordingly sent from the Killadar to the Nabob at Arcot. The attack was discontinued on this account, but the gallery across the ditch was still pushed on.

The Council at Madras, in allowing Call to go to the siege, say that "as he had the rank of Captain since 1757, when he was second engineer, he was now to have the rank of Major, from date of his commission as chief engineer."

Captain-Lieutenant Stevenson was appointed sub-director and captain from 16th November 1761 (date of death of Leigh); Lieutenant Cotsford, engineer-in-ordinary, Captain-Lieutenant; and Barnard appointed practitioner engineer, and Ensign.

Directly the Council learnt that Stevenson and Cotsford had arrived, they told Call that as soon as Vellore was taken he was to proceed to Timery and Cauverypauk, remove stores thence to Arcot, and destroy the two forts. Having done this, he was to go to Chettipet and Carangooly, send the stores to Wandewash, and destroy those two also.

Major Call had represented to Caillaud the necessity of forming a Pioneer Company of sixty men, with officers, and recommended Captain Bonjour for the commandant, with the rank of Captain.

Caillaud was accordingly authorised to raise this body of pioneers. Captain Bonjour was appointed Commandant, and Mr. Canmore Lieutenant. The Pioneers were allowed double pay during the siege of Vellore, and in future were to have this whenever they were employed on active service in the field.

Nothing very much more of interest occurred during the remainder of the siege; but on the 18th December Captain Stevenson was wounded in the head, while a Mr. Lloyd was killed in the trenches. The gallery was well advanced, but as it went on slowly Call proposed to fill up the ditch uncovered. On the 23rd fifteen feet was done without loss, on the 24th forty-five feet more, and a level passage made, above water, to the foot of the breach, with small loss. On the 26th Vellore Fort surrendered at discretion, and Major Campbell took possession. The hill forts of Sazarow, Gazarow, and Mortazagur were surrendered at the same time. Major Call, in his report, says that the passage across the ditch being effected, nothing could have prevented our opening the whole fire of fourteen guns and nine mortars on the 26th, when the Killadar, seeing it was hopeless, agreed to surrender. Call immediately visited the front attacked, and examined the preparations made for the defence. He found them to be such as might have cost many lives to get over, and considering the number and hard duty of the garrison, he thought it was astonishing how they were effected.

Behind the second intended breach he found a ditch within the rampart, and five mines loaded under it. Behind that ditch was a breastwork with a ditch in front of it.

Six guns were planted on the breastwork, with places for two tiers of musketry. He thought the Killadar was indefatigable in searching for obstacles, and had proved himself not unskilled in the art of defence.

Three days must, however, have made us masters of Vellore,

although Major Call was persuaded that many must have fallen in the assault, and much ammunition been expended.

Besides this, the hill forts might have held out, and given much trouble. They were extremely difficult of access by the common road, and might be considered impregnable, especially the middle one called Gazurow. The pettah was greatly protected by them, and the attack of Vellore on north-east and south might be rendered very dangerous were the forts furnished with heavy cannon and ammunition.

The south front of Vellore was much battered, and required immediate repair. The engineers at once commenced to carry out these, as well as to remove the gallery from the ditch, fill in the trenches, and level the batteries. Major Call estimated the cost of repairs, &c. at 1,00,000 rupees, and was of opinion that when that had been properly laid out, and proper supplies of artillery and stores put in, no force could be collected to take them from 150 Europeans and 1,000 sepoys. He considered that Vellore, with the three hill forts, formed the strongest fortifications he had seen in India.

Towards the close of 1762 Major John Call submitted five alternative plans for strengthening the south front of Fort St. George. The Council selected No. 4 as by far the most preferable in point of size and small number of troops for its defence, and ordered the chief engineer to at once set to work.

Call thus describes the selected project: "No. 4 is a project calculated to remedy defects, and really would render the south front superior to any other, but it would prove a very expensive undertaking.

"The old bastion in this remains as a kind of retrenchment, and is enveloped by another of a good size, and the curtain is enlarged. Instead of a little ravelin with flanks, the faces of the two lunettes are continued till they join the faces of the ravelin, and the whole is formed into one work, which may be called a

double tenaillon, the exterior faces of which defend each other reciprocally, and the wings are well flanked by the collateral bastions; so that here is one capacious extensive work which covers the whole work instead of three."

"Before the salient angle of the bastion is a good counterguard, well flanked, which stops all approach by the sea side."

"In short, there could not be designed a stronger project, but the expense will be very great."

"In the previous February two objects had been proposed; either to fortify the south front, or to face the western bastions and curtains. The latter of these was justly preferred, and is now almost complete."

The Board resolved also that the north-west curtain should be continued till it joined the north curtain, and that the enclosure of the town on that side be completed, and the old town wall, as well as part of the sheds belonging to the Mint, be removed, and the old Mint bastion destroyed, to open a communication between the north part of the town and the western rampart.

The bank and hedge, composed of bamboos, milk-hedge, palmyras, and all kinds of thorny shrubs, was also approved of. The blind on north-east was in a very ruinous state, and was to be made into a more useful and very defensible work, by cutting it off from the covered-way, and carrying a ditch quite round it next to the sea.

In this report it is remarked: "The nabob stone pillars, which formerly composed a useful colonnade between the sea gate and the inner fort, having been brought back from Pondicherry (the French must have removed them from Madras between 1746 and 1749) have been set up in the position they formerly stood. There were also many of the timbers brought with them, so that if the Honourable Board think proper they may be replaced, and the terrace completed, as opportunity will admit."

These pillars, it is supposed, are the fine black stone ones which now form a portion of the building containing the old Government records.

On the 28th June 1762 an expedition was proposed against Manilla. General Lawrence, Mr. Bourchier, and Major John Call dissented, but it was nevertheless despatched. General Draper commanded the army, the command of the fleet being with Admiral Cornish. Below I give the report of the engineer commanding on the expedition, Captain Stevenson.

"The President and Council not thinking proper to spare Major Call, did me the honour of appointing me engineer on this expedition, with the assistance of Messrs. Cotsford and Barnard; as which I think it incumbent on me to give an account of our military transactions from our arrival before the place till we became masters of it; but as these matters cannot so properly be introduced in a letter, I have collected them in the form of a journal apart, and shall make the description of the fortifications the subject of this:—

"The city of Manilla lies in a large bay in the Island of Lucona, of near thirty leagues in circumference, in 14° 40′ N. latitude, and 3° 30′ to the west of St. Bernardino. It is about two miles and a half in circumference, and the buildings pretty regular, crossing each other at right angles.

"The lower stories of the houses are of stone, and the upper of wood, on account of the frequency of earthquakes in these parts. Some of the churches and convents are entirely of stone, but the walls are of a surprising thickness. Many of the buildings are very large, but few worthy of particular notice on account of their architecture.

"The foot of the walls to north-west is washed by a fine broad river, navigable for small vessels a great way up the country. There is, I am told, eight feet on the bar at high water during the driest season of the year." "The entrance is preserved by two piers, which run 500 or 600 yards into the

bay, which would otherwise be choked up by a bank of sand." "The north-west end of the city is cut off from the rest by a regular front, with its ditch and drawbridge, and forms the citadel called St. Jago, which is triangular, and commands the city, bay, and river." "The walls of the city are of stone, and the fortifications tolerably regular. Between the bastions of St. Michael of the citadel and the Royal bastion St. Diego, which comprehends the sea front, are the small low bastions of St. Francisco, St. John, St. Isabel, St. Joseph, and St. Eugenio, with long low curtains between them, without either ditch or palisade before them." "The walls are from twelve to fourteen feet high, and the ramparts about eight feet broad. There is in this front a sally-port and the gate of St. Lucia."

"The Royal bastions of St. Diego and St. Andrew, with the intermediate curtain, make a very formidable front, the bastions mounting twelve guns in face, four in flank, and the curtain sixteen, with a wet ditch, low covered-way, and low glacis before the whole. In this front is one of the principal gates of the city, called Porta Real, with its drawbridge, and a small ravelin before it. Next to the bastion of St. Andrew, is the Royal bastion of St. Lorenzo, which is a very spacious one, but mounts all its cannon *'en barbette'*; the curtain between it and St. Andrew's is not above eight feet broad, and continues about the same breadth from St. Lorenzo to St. Gabriel. Between these two bastions is the Parian Gate, which leads to the Chinese town and suburbs of Santa Cruz and Minonda. The projecting part of this gate forms a small flat bastion, the gateway opening through the flank."

"There is a kind of double tenail before this gate, but it is a very low, defenceless work. The bastion St. Gabriel mounts seven guns in face and two in flank, but they are so crowded that half of them would be useless on service."

"Before the two last-mentioned fronts runs a broad morass

which serves for a ditch, and is a very good defence at high water, but almost dry when the tide is out."

"From the bastion of St. Gabriel to St. Francisco of the citadel, runs a low narrow curtain, only broad enough for musketry, having no cannon for its defence, but from the flanks of St. Domingo and St. Gabriel. But this front is very well secured by the river."

"It has in it two gates, one called St. Domingo, and the other the Magazine Gate. At the extreme front of the citadel, under the bastion St. Barbera, are two semi-circular batteries that command the entrance of the river, and communicate with the bastion by a swamp." "The natural situation of Manilla is such that, should it ever be thought necessary, it is capable of being made a very formidable place; but not at a small expense, being so extensive."

The vicinity of the suburbs is one of the greatest obstacles at present to its making a good defence against an European force, as we experienced in attacking it, by taking possession of the churches of St. Jago and Bagombaya (that are not 300 yards from the walls) the day after our landing, behind which our troops were lodged in the greatest security, and all the necessaries for carrying on the attack collected with great facility; whereas had there been an esplanade of 700 or 800 yards, we should have been obliged to open our trenches at that distance—the fatigues of carrying on which, and relieving the guards of them, would have been more than our handful of men could have got through with, for we were obliged to employ our soldiers in bringing up our shot and shell, cannon, &c. from the landing-place, the natives, instead of assisting us, being in arms against us."

"Another great fault is, the parapets of all the works are of stone, which, instead of being a protection to the troops placed behind for their defence, make a greater destruction among them (owing to their splinters) than the enemy's shot; which we had a

convincing proof of on opening our battery, for, notwithstanding they could oppose twice the quantity of cannon against our battery that we had in it, yet they were obliged to abandon them all in a few hours, not being able to stand on their works for the splinters of the parapets.

"The speediest and least expensive way of making it more respectable to an European enemy would be to make good parapets of earth on all the works that are spacious enough to allow of it; to deepen the ditch considerably on the east and south-east fronts; to build batardeaux with sluices where the ditch communicates with the river, that the water may be kept up at spring tides in the ditch and inundations, and not suffered to ebb and flow with the river as at present, by which it happens frequently that the water in the ditches is not knee-deep when the tide is out." "The ditch should be continued round the west face of the bastion St. Diego, and a stout work built to defend it, as well as to shut up entirely the sea front, which is very weak and defenceless. The glacis before the south-east front should likewise be considerably raised, and the buildings cleared away within at least 600 yards of the walls all round. The north front would require nothing further than to be well palisadoed, the river being a sufficient security to that side. Should it be ever found necessary to go to the expense of putting it in the above-mentioned state, I look upon it that, properly garrisoned, with an experienced officer to command it, it would be capable of making a very good defence against the most formidable European force that may be expected in this part of the world; but should it only be thought necessary to secure it against all attempts of the natives, palisadoes set up in those parts where the walls are low, and the water kept up in the ditch by a batardeau, will secure it from anything that can be feared from them.' I hope the above description of the place, with the assistance of the enclosed plan, will sufficiently explain anything relating to fortifications. I have been so employed

since the capture of the place, that I am obliged to defer sending a particular plan of the town and harbour of Cavite till another opportunity.

"I am, with the utmost respect, &c. &c.

"WM. STEVENSON.

"*Manilla*, November 10th, 1762."

The fleet, consisting of eight ships of the line, three frigates, and two Indiamen, anchored in Manilla bay on 23rd September, after a passage of eight weeks. The same evening, boats sounded the entrance to Cavite harbour, and left a buoy 450 yards from Rivera Point in four and a half fathoms. The next day an officer with a Spanish flag, came on board to know why we had entered the bay (they had not heard of the declaration of war).

The English determined to attack Manilla, and not Cavite. Officers were sent to demand surrender.

The bay was then reconnoitred, with a view to select a proper spot for landing the troops; and in the evening the troops landed one and a quarter miles south of the fort. There was a good surf on, and several of the boats were stove in; but no lives were lost.

The troops took post at Malatta Church, a quarter of a mile beyond the landing-place.

On the 25th, early, Colonel Monson advanced with a company of 79th, and took post at the Hermitage, 600 or 700 yards from the walls, and in the afternoon a party was advanced to the church of St. Jago, 300 yards from the walls.

On the 26th the enemy were driven from Bagombaya Church. We were in great distress for want of fascines and tools, the store-ships not having arrived. A party of 400 men were employed in making fascines and gabions. Two mortars were brought up, and some shells thrown into the city. Some straggling seamen were murdered by the natives.

On the 27th we continued to make gabions, &c., and opened fire at night from two more mortars from behind the church, and threw up a breast-work to the left of St. Jago.

On the 28th, Lieutenant Fryer, the General's secretary, going into garrison this morning with a flag of truce, to conduct a relative of the Governor, was murdered.

The Governor expressed the utmost horror of the act.

On the 29th we broke ground, and commenced a battery of eight 24-pounders, 300 yards from the walls, to breach the face of the bastion of St. Diego, near the angle, the ditch terminating to the right of it.

Two ships came in (*Elizabeth* 60, and *Falmouth* 50 guns), moored on the capital of the bastion of St. Diego, one mile distant, and fired into the town.

October 1st.—We began a battery this afternoon for two 13-inch and two 10-inch mortars, and at night a strong working-party was employed in completing an eight-gun battery.

There was a severe gale of wind this night, and the store-ships were driven on shore; but our stores were landed. The next day, the wind continuing to blow very fresh, a boat from the wrecks was overset, and most of the people in her perished; amongst them an officer, Lieutenant Hardwick.

The platforms were laid this day, and all the guns brought into our battery.

The battery was completed at night, and the mortar-battery was also nearly ready.

On the 3rd, at daybreak, we opened fire from eight 24-pounders and five mortars. Our fire was at first answered briskly, but the enemy were silenced in two hours, and before night our artillery had nearly ruined the defences on the bastion of St. Diego. During the night another battery of three 24-pounders was formed, to destroy the defences of the Ravelin, and the flank of St. Andrew's, which defended the breach; also the flank of the small bastion of St. Joseph.

All night a constant fire of grape and musketry was kept up on the breach, and all our mortars were directed to that part.

4th.—A party of enemy's irregulars surprised the seamen's quarters at 3 A.M., and killed and wounded a good many; they were, however, finally repulsed, and lost 200 in their retreat. A Mr. Porter, of the fleet, was wounded—a very active, brave young fellow. Another party got possession of Bagombaya Church, and killed and wounded sixteen or seventeen of our men; but in their retreat they suffered very much. Among the killed was Captain Strahan, who commanded our party at the church.

This night the three-gun battery was finished.

The face of the bastion of St. Diego was in a very ruinous condition, and we prevented them repairing it by a constant fire of grape, &c.

5th.—The platforms were laid in three-gun battery, and we then opened our fire on St. Andrew's Bastion, which was shortly after abandoned by the enemy. They brought three guns on the curtain to bear on ours, but they were shortly dismantled.

A man was sent to the counterscarp to examine the breach. He reported it practicable, on which the General determined to attack next morning, as our little army commenced to complain of fatigue—being no sooner relieved of a guard than sent on a working-party, and that in heavy rain, which we were seldom without during the whole siege.

6th.—An hour before daybreak the whole army was under arms. The disposition for attack was as follows:—

Twenty volunteers and an officer from each corps made first attack; these were followed by grenadiers; after these the pioneers, with everything necessary for making a lodgment; after them the whole army. Parties were posted all along the front, with musketry and field-pieces, to keep the enemy from their parapets whilst our troops advanced.

An officer and thirty men were posted in the steeple of Bagombaya Church, to prevent them firing from St. Andrew's Bastion. Signal being given, our troops marched on briskly, and were in possession of the breached bastion before the enemy were alarmed; and we did not meet with much opposition in getting possession of the sea-line and St. Andrew's; but in attempting to open the Royal Gate we lost some men, and Major Moore, 79th. A number of men got inside the guard-house, and refused to lay down their arms; they were all put to the sword, to the number of sixty or seventy. About thirty more shared the same fate at the Parian Gate. As our troops marched up the street they were fired at from houses. Even after our troops had given quarter, and while a flag of truce from the citadel was with us, several of our people were killed and wounded; but on the General sending an officer into the citadel, all hostilities ceased.

The Governor came out about 8, and our troops took possession at 9.

During the siege three officers were killed—

Lieutenant Porter	..	Sea Battalion.
Captain Strahan	...	79th.
Lieutenant Fryer	...	(With flag of truce).

Lieutenant Spearing, of the Marines, was wounded.

The day of the storm—

Killed—

Major Moore	...	...	79th.

Wounded—

Captain Sleigh	...	Grenadiers.
Lieutenant Garnons	...	79th.
Lieutenant Hazlewood	...	79th.
Lieutenant Hogg	...	79th.
Ensign ———	...	Sea Battalion.

Drowned—

Lieutenant Hardwick.

Total—5 Officers killed and 6 wounded.

We had Europeans killed	...	21 + 69	wounded.
Sepoys „	...	5 + 23	„
		26 + 92 = 118.	

The reason for the small loss in assault was owing to the enemy's bad look-out; for we were in possession of the breach before they were fairly alarmed.

The Spaniards had three officers, two sergeants, fifty troops of the Line, and thirty militia killed, without reckoning the wounded. The Indians had 300 killed and 400 wounded.

Money and plate distributed to the victors amounted to 4,96,000 dollars, of which one-third was allotted to the East India Company.

The English remained in possession of Manilla till 31st March 1764, when news arrived of the Treaty of Peace, and the English evacuated Manilla, Spanish authority being re-established.

On 15th April 1763, the governor of Fort St. George considered the pass of Santgad of so much consequence for the security of the Carnatic, that Major Campbell was directed to order a captain to take command of the forts, and Major Call, the chief engineer, was told to take a survey of the forts and pass, give directions for strengthening them, and also inspect the works at Vellore itself.

Major Call carried out his orders, and returned to Madras on the 2nd May.

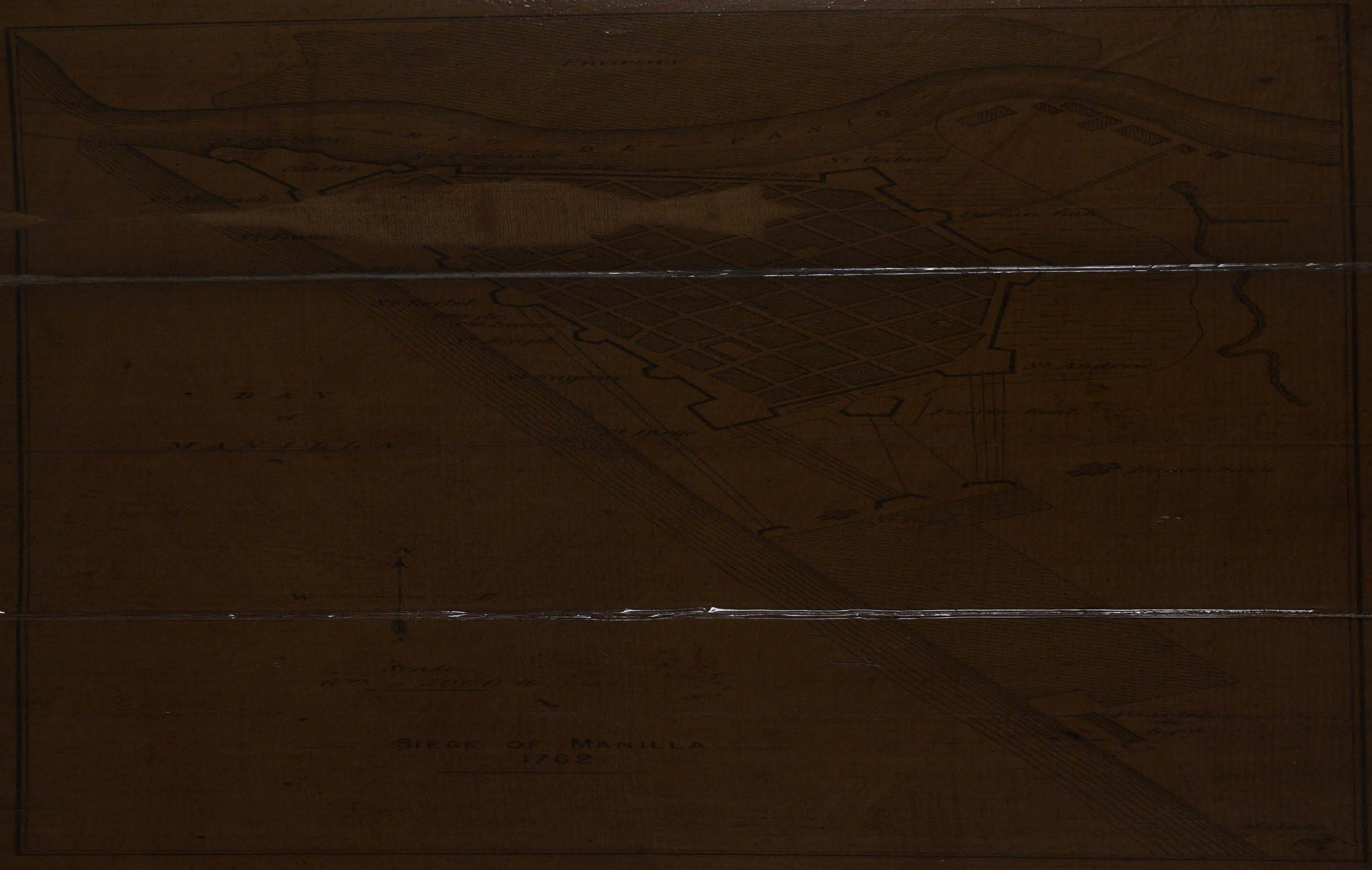
The forts of Santgad lie rather more than thirty miles west of Vellore. Major Call considered the place exceedingly strong by nature.

He left Mr. John McLean there to make a survey of the

pettah and hills. Meantime he stated that "he thought we should only hold the hills, and that a small force would suffice for this purpose."

Call reported: "It appears that the first pass from the Deccan, through the chain of mountains which divide the Peninsula, into the Carnatic, is at Damalcherry, which lays directly west of Madras, and is in the possession of a polygar, supposed to be a friend; the next is about thirty miles further south, and is called Cuddapahnuttam, now in our hands. The third is called Gejadavy, about forty miles south of the second. The fourth is called Metteepettah, or Ahtur Pass, directly inland of Thiagur, and about thirty miles from it. The fifth, and last, is near Tureyore, and has been seldom, or never, used for incursions. The three first, are those through which the Mahrattas or the Subah's troops have commonly entered the Carnatic, and the other two are only open to the Mysoreans; but the possession of Thiagur will render that at Ahtur very hazardous to an enemy. Through the Damalcherry no enemy can enter if the Polygars oppose him, and they are all well affected to the Nabob. While the Nabob is master of Tripety, Chundergerry, and all the neighbouring country, Cuddapahnuttum is secured; and though Vaniembaddy is in the hands of Hyder Naigue, or the Mahrattas, and Gejadavy open to them, an enemy entering that way must pass near Amboor (held by a friend of the Nabob), and in sight of Sautgur; and they must also pass near Vellore before they can come into the Carnatic, to do any mischief—so that, being possessed of Sautgur and Vellore, the three most dangerous passes are either shut up or rendered very hazardous to pass through or retreat by."

"From Sautgur to Cuddapahnuttam Pass the distance is fifteen miles, and the road, for the latter half of the way, is flanked by hills on each side, within the reach of musketry, which hills at last join together, and a very narrow passage (not more than six feet wide, with very high banks on the sides) is



SIEGE OF MANILLA
1762

cut through one of them for 100 yards, where a gate closes the entrance from the west, and to the right and left is carried on a wall to defend the passage. After passing [illegible] the road is quite environed with hills, which continue very close to each other as far as Cuddapahnu[illegible], which is also in the Nabob's possession, and about eight miles beyond the pass. That any body of men, large or small, should pass through this defile when opposed by a few men with musketry, I am persuaded is impossible, and no artillery, or any other large carriages, can pass, even without opposition, unless they are dismounted."

Call also visited Vellore, and states:—

"I shall always think that Vellore, finished as it is begun, and, as proposed, furnished with provisions and ammunition sufficient to serve a moderate garrison for a long time, would be an undertaking no country power in India could think of attempting; and no European power that had not been long established on the coast, with plenty of all necessaries and stores, while unassisted by the Carnatic Government, could possibly accomplish it in many months."

CHAPTER IV.

Siege of Madura.—Lawrence's proclamation.—Tanjore Rajah agrees to co-operate.—Council of war.—Siege raised.—Preston left in command.—Charles Campbell appointed to command the army.—French officer offers to desert.—Rebels completely invested.—Preston marches towards Palamcottah.—Siege undertaken in earnest.—Hamilton of the Engineers killed.—Assault made.—Preston badly wounded.—Pioneers from Manilla arrive in camp.—Engineers at the siege.—Madura taken.—Palamcottah taken.—Survey of passage between Ceylon and mainland.—Death of Stevenson.—Madras Government entertain fears of Hyder Ali.—Survey of the passes.—Caillaud's treaty with Nizam Ali.—Colonel Joseph Smith arrives in India.—Colonel Wood commands in Carnatic.—Call inspects forts and passes.—Bonjour takes Vaniembaddy.—Nizam moves towards Bangalore and Colonel Smith marches to join him.—Nizam Ali commences hostilities against us.—Colonel Smith takes command in the Baramahl.—Battle of Changama.—Battle of Trinomally.—Confederates defeated.—Hyder moves to Amboor.—Relief of Amboor.—Hyder attacks a convoy, and is repulsed.—Nizam treats with Smith.—Ignominious peace with the Nizam.—Hyder goes to west coast.

In 1759 the Nabob's Government, finding that the districts of Madura and Tinnevelly were in great disorder, and that they were unable to get any revenue from them, sent Mahomed Yusuf with a strong force to take charge of the districts. He agreed to rent the districts for an annual sum of seven lacs of rupees. He had some considerable trouble in restoring order, but being a good soldier, he eventually succeeded, and introduced a good government. He was, however, unable or unwilling to pay the

rent required of him. He probably contemplated independence; whether he was unfaithful or not does not seem to be quite clear. At any rate, the Nabob and the English Government resolved to coerce him, and in 1763 an army was sent against him. He tried by negotiation, and by his influence with some of the English, to clear himself; but finding this of no avail, determined to fight.

His lengthy and gallant defence show that he had much money at his disposal: hence it would seem that he really did intend to found an independent kingdom. Orme says: "He first enlisted under Captain Clive, a little before the battle of Covrepank (February 1752); he was a brave and resolute man, but cool and wary in action, and capable of stratagem; he constantly procured intelligence of the enemy's motions, and having a perfect knowledge of the country, planned the marches of the convoys so well, that by constantly changing the roads, and the lines of bringing the provisions out of the woods, not one of them was intercepted for three months." And again: "Mahomed Isoof, an excellent partisan, whose merit had raised him from a captain of a company to be commander-in-chief of all the sepoys in the English service." *

It was in June 1763 that Major-General Lawrence recommended that the expedition against Yusuf Khan (Usoff Cawn in old records), should be no longer delayed. Colonel Monson was to command, and Admiral Cornish was desired to land the troops sent from Madras, as far as possible to the south. Lawrence himself went to Cuddalore, and thence to Trichinopoly. On 8th July he caused a public notice to be affixed to the gates of Trichinopoly to the following effect:—

"I, Major-General Lawrence, do hereby give notice that I have joined the Nabob against the rebel Usoff Cawn; whoever is

* On 5th February 1759, it will be remembered, this man was presented with an amethyst ring set with diamonds.

taken with him will be deemed a rebel, and treated accordingly; but those who leave him in due time, or before his troops come to any action, will be favourably received by the Nabob. As the English are in peace with all nations, Europeans who are found with him will be treated as rebels likewise, except they leave him before his forces act against the English, in which case they may be assured of a favourable reception."

A few days after, Monson reached Trichinopoly, and having heard that Usoff Cawn had attacked a fort belonging to the "Nalcottah man," Major Preston, the second in command, was ordered on the 14th to march against him. General Lawrence requested that Major Call, the chief engineer, should join the army at once, and accordingly he, with all the engineers, set out on the 25th, and arrived at Trichinopoly on 2nd August. On 21st July an interview took place between the Nabob and the King of Tanjore, half-way between Trichinopoly and Tanjore, when the latter promised to assist with troops and grain.

The artillery and stores were now sent forward in three divisions well covered by Major Preston. Some correspondence took place between Lawrence and the Council, regarding the disposal of Usoff Cawn when he should be captured.

Lawrence thought that when taken he should not be sent to Madras, but delivered to those who were to receive the management of the countries he had usurped. Mr. Pigot and Council, however, considered that Usoff Cawn would be a dangerous man to be entrusted in the hands of the Nabob if his intentions were to make him a State prisoner, "but if it be agreeable to you to order the commanding officer to execute him upon the first tree, in sight of the army, it will be quite satisfactory to us."

On 2nd August, Monson marched from Trichinopoly, while on the 6th, Preston strongly encamped some fifteen miles from Madura. On the 11th, a reconnoitring party on our side was attacked by a greatly superior force and obliged to retreat. We

lost over 200 stand of arms, and 150 sepoys killed and wounded, and forty missing.

The enemy also suffered heavily.

In spite of this reverse, on the 20th we captured one of the out forts, and three days after the rebels made their escape out of Tirumboor, and abandoned Vallichinattum and Omnasatrum forts.

Monson commended Preston greatly for the capture of Trivandore and Tirumboor.

Monson began his march from the latter place on 28th August, and found Usoff Cawn encamped under the walls of Madura. The Nattum Pass had been taken possession of by Mr. West with 2,000 of the Nabob's troops.

Madura was now partly invested, and Monson encamped at Teppacolum (by this, it is presumed, is meant the fine Teppacolum* south of the river, two or three miles east of the town and fort).

"On 2nd September, Monson went out with the European cavalry, 200 or 300 Black Horse, a battalion of sepoys, a European picket, and two guns on the west of the fort. He fired a few shots from the guns, advanced the cavalry, and these charged: they were, however, deserted by the 'Black Horse,' and had to retire with considerable loss, Captain Donald Campbell and Lieutenant Stevenson missing. Campbell was wounded and taken prisoner, while Stevenson was badly wounded, and died a short time after. Our loss was seventeen European cavalry killed and wounded. Usoff Cawn was out to see the fight, met Campbell, and expressing his great regret at seeing him wounded, treated him most civilly."

Monson and Call now reconnoitred the north side of the fort. Call was of opinion that Madura could not be attacked with less than fourteen guns and ammunition for ten days' firing. He

* A large tank built of Ashlar masonry.

considered the best point of attack would be the north-east corner, or near it, on the east face.

"It would be necessary to have an enfilading battery on the other side of the river, on line of the east front of the fort produced, and a post must there be established." "The extensive esplanade made round the fort made it necessary to break ground some 1,200 or 1,500 yards distant, and it was clear that the works would be greatly interrupted by sallies." Artillery required was stated to be ten 18-pounders or 24-pounders, besides four 12-pounders for enfilading, ninety rounds per day for each gun. Call also gave a list of gabions, fascines, &c., required.

On 7th September, a council of war was called, at which were present Majors Piers, Chapman, Preston, and Call. The question put was: "Shall attack be undertaken with the present quantity of cannon, shot, and powder?" The answer was: "Guns and ammunition insufficient to undertake the siege with any prospect of success, unless they can be supported with 2,400 24-pounder shot, 2,900 18-pounder shot, 1,100 12-pounder shot, and 937 60-lb. barrels of powder. This would suffice for thirteen days' firing."

The reduction of Madura could not be laid on one side; although Monson thought success very precarious, as he could not camp within two and a half to three miles of the fort, while Call stated that he could not break ground at less than 2,000 yards. To add to these difficulties, the country was greatly flooded.

The Council in Madras, in replying to this report, thinking it possible that the siege might have to be abandoned, directed Monson in the following amusing manner:—

"If expedition has to be abandoned, a declaration is to be sent to Mons. Flaucourt (in command of the French), setting forth that we do so to avoid acts of hostility against the French"(!)

During the month of September the work was much retarded by rains.

We opened fire on the fort on the 24th September, and after five days' firing it was reported that very little success had been attained. There was a two-gun battery within 200 yards of north-east angle, to ruin the face of it; two guns more at 500 yards to ruin the shoulder and re-entering angle; four more playing on a large bastion on the east front; but little or no impression was made.

On the 28th Call pushed on by night as far as possible, and gained the glacis by a double sap. It now appeared that unless we could keep up a constant heavy fire, we should have no alternative but to retire to Tirumboor and Nattum, and wait till the monsoon was over. Gaining the glacis by a direct double sap was ineffectual, as the rebels opened three guns on our flank.

On 2nd October we began a battery to ruin the flank. It was hoped that this battery would be finished on the 5th, and Monson reported that if he judged he had sufficient powder and shot to destroy the flank and make a breach, he would commence firing; but if he could get none from Trichinopoly, he would call a council of war.

On 27th October he stated that "it was unadvisable to continue the siege, as there is no likelihood of their being able to get possession"; so he purposed to take post on a rising ground, three miles north-east of Tirumboor, where he would cover Marrawar and Nallacottahman's countries, and keep open communications with Trichinopoly by Nattum Road and Tondi." Preston proposed that "the army should be cantoned at Tirumboor, Trivadare, Omastrum, Nattum, and Towarancuritchy. Heavy artillery to be taken beyond Nattum, and hospitals removed to Trichinopoly." "Want of success owing partly to insufficient supply of military stores, and partly to very bad weather.

On 3rd November, Monson reconnoitred the ditch (it was unfordable, and twenty-eight yards broad) before the great work on left of attack. "It was clearly too formidable to think of filling it up at this season."

He thereupon entered into a correspondence with Usoff Cawn, but finding he meant nothing by his letters, broke off the correspondence, and from the 5th began to take measures for raising the siege. The pass of Nattum had to be secured, while a part of the army took possession of the rebels' country before the harvest was gathered. Military stores and guns were to be collected at Towarancuritchy and Nattum, and when everything was properly prepared, the fort was to be reinvested. Our losses in this unsuccessful attack were somewhat heavy. On 24th October alone eighty-four wounded sepoys arrived at Trichinopoly. It was now settled that what was required was—

Four 24-pounders,
Four 18-pounders,
One 12-pounder,

in addition to previous armament; and shot for twenty days' firing, at ninety rounds a day for twelve guns.

On 18th November 1763, Colonel Monson set out for Trichinopoly, leaving Major Preston at Tirumboor in command of the army.

The intentions of the latter were to march shortly to the south, to deprive the rebel of any advantage he might derive from the country. On the 25th, accordingly, he made up his mind to march back to within sight of Madura; but the men of the 96th Regiment refused to march. The officers of the regiment did all they could to assist Major Preston by influencing their men, but without avail. The result of this was that the President and Council of Madras resolved to receive non-commissioned officers and men of Her Majesty's regiments and artillery into the service of the Company for periods of one, two,

three, four, and five years, giving a bounty of five pagodas (17½ rupees) for each year, and they further proposed to withdraw all His Majesty's troops, and reinforce the army with the troops of the Company.

Owing to the refusal of the men of the 96th Regiment to march, Preston was compelled to remain at Tirumboor throughout the month of December. This inaction was not altogether unfortunate, as during December the rains were very heavy, and it is probable the loss of men by disease would have been great.

Usoff Cawn, during this time, received a reinforcement of 200 men from Dindigul; but the Poligars (chiefs) of the country generally were in our interest. At last Preston was enabled to move, and on 29th December 1763 marched to Andacotavum (about one mile from Teppacolum).

The enemy showed themselves at Teppacolum, but not long enough to receive any harm from us.

During the time we remained inactive, Usoff Cawn wrote, representing his concern for his past behaviour, promising obedience, and asked to be permitted to rent Madura and Tinnevelly for seven lacs. The Governor replied that the only means Usoff Cawn had for securing his life and effects, was to surrender all the places in his possession, and rely entirely on the mercy of the Governor and Council.

The position taken up by Preston had a fine command of the different roads from Madura to all our other posts. As soon as his position was strengthened, Preston proposed to move six miles to the south, and establish a strong fort at a remarkably high rock, with a mosque on it, on the high road to Tinnevelly. This was called Secundra Mullai.

Usoff Cawn was in no way idle. By the 15th January 1764 the east face of Madura was entirely repaired, and above 3,000 workmen were constantly employed on other parts of the fort.

Major Charles Campbell (as senior officer) now applied for command of the army. The Council considered that his appointment was unavoidable; but they regretted the necessity, as they were so well pleased with Preston. Accordingly, on 26th January 1764, Campbell was appointed to command the army, but Preston did not deliver it over till 13th February. Preston learning that Usoff Cawn was receiving reinforcements from Mysore, moved the army to the west of Madura, so as to cut off communications between Madura and Dindigul.

The day after Campbell assumed command, Major Call, chief engineer, arrived in camp, on the south bank of the river, north-west of Madura. A new post was made out of a ruined pagoda on the north side of the river, opposite the camp. We now had four posts besides the camp, and it was proposed to form two more. Usoff Cawn had several posts out of the fort, at distances of 500 to 800 yards, and by means of them kept us at a distance. Preston, at this time, was commanding at Secundra Mullai. Call reported that no gabions, fascines, or pickets, had been made, and that he required more carpenters, smiths, and fascine makers. He further stated that "Usoff Cawn had 2,000 men at work, and expressed his astonishment how he got the people to stay, or found money to pay them," and finally remarked that "we should want all the troops we could assemble, although we had the whole of the Manilla garrison." We had 400 Europeans and 1,200 sepoys, whereas it was considered that we must have 800 Europeans. Usoff Cawn had made great additions to the fort, and had got out-posts on three sides. It was necessary that we should take all these, as well as all forts within fifty miles of Madura. More sepoys, and more cavalry were required, to enable us to cut off all communication for ten miles round.

Call hoped to hear daily of the troops from Manilla or from Bengal.

Monsieur Marchand (who commanded the French in

Madura) protested against the attack of the place. The result of the protest was that Campbell was directed by the Council to endeavour to seize Marchand, if he was the same man taken by Richard Smith, near Devicottah, in March 1760 who was permitted to go on parole, and had never been exchanged.

In February, Preston received an anonymous letter, apparently from the officer commanding French Hussars, offering to desert for 15,000 pagodas. He proposed to effect this by feigning a a sally. Preston offered 8,000 pagodas. As no dependence could be placed on the promise, Campbell posted 200 Grenadiers and 150 rank and file. All the European cavalry, 1,700 sepoys, and six field-pieces, with 800 horse, were to lie concealed, Campbell himself being near at hand with the rest of the army.

On the 26th, three officers and forty-one hussars came out to us, as proposed. Fourteen of the best men were taken into our service, and the remainder sent away. Mons. Riquet was the commanding officer. He was paid 1,500 pagodas in cash, 2,500 by a bill on Mr. Floyer, and 4,000 by a bill on the Honourable Board at Madras. Two days after this the enemy abandoned the advanced redoubt on the south face of the fort; we took possession, and encamped the army on the same face.

Preston now took charge of the Teppacolum, and on the 2nd March the rebels were completely invested. Each of our posts was within gun-shot range of those on either side.

The Black Horse of the enemy, which up to this time had been encamped on the glacis, was cannonaded and forced to enter the fort. About this time, Major Call had a fall from his horse, and broke his arm, but in spite of this he remained in camp, surrounded by his work-people, employed in making fascines, gabions, &c.

A fort, Putta Kotta, about fifteen miles south of Madura, was captured at this time.

The following were the different forts and posts depending on the army :—

	Captains.	Subalterns.	Guns.	Companies of Sepoys.	Europeans.
Nuttum	—	1	2	6	—
Sattrum and Walshynattum	—	2	2	5	—
Trivadore	—	—	2	3	—
Trivambore	—	1	3	4	—
Tondy	—	—	—	2	—
Tondy Redoubt ...	1	—	5	7	—
Fort Defiance... ...	—	1	5	3	28
Nattum Redoubt ...	—	1	2	4	22
Exegon	—	1	2	2	22
Damoodra Pillay Redoubt	—	—	1	5	12
Tumanly Redoubt ...	—	1	2	3	—
Nemellie...	—	1	1	4	—
Putta Kotta, 15 miles on Tinnevelly Road		—	—	3	—
Sholavandan, 12 miles on Dindigul Road	—	1	—	4	—
Total ...	1	10	27	55	85

Twenty of the companies of sepoys belonged to the Nabob.

In addition to the above it was proposed to erect two other redoubts—one to the left of the Teppacolum, and the other in front. This was the state of affairs on the 4th March 1764.

Captain Hart now took Chinampettah by storm, our loss being Ensign Carty killed, and fifteen wounded; 800 of the enemy were killed and wounded.

Another detachment was on the march to attack a mud fort south-west of Madura.

On 15th March we caught a hircarrah, who had been in Usoff Cawn's employ for seven years. He said he would tell us all about Madura.

On the 16th, Preston marched towards Palamcottah. Campbell expected him to be absent twenty days, and that on his return they would be in a position to break ground. Since the beginning of March the army had been without arrack, and the sick list was 100 more than during February. This increase of sickness was attributed solely to the want of arrack.

At this period, several lieutenants misbehaved themselves. They were aggrieved at some promotions which had been made, and asked leave to go to Madras. They were permitted to go, although their conduct was characterised by Campbell as unreasonable and unmilitary. The result was that they were dismissed the service. Their names were Hunterman, Ward, and Philips.

On the 27th Captain Fitzgerald, with his troop and 120 Tanjore Horse, while observing the enemy on the Teppacolum side, near Fort Defiance, was charged by "Cawn Sahib's" horse, but repulsed them with great loss. Our loss was five troopers, and ten "blacks," and thirteen horses killed and wounded. The enemy's horse would have been cut to pieces had they not galloped under the guns of the fort.

Preston meanwhile had taken Soondavandy, after he had nearly breached one of its towers.

He reported that the garrison of Shevalapoothoor had taken refuge in the Poligar country of Stractoor, eighteen miles south of Shevalapoothoor.

On 5th April, Preston was at Gaingoondain, and reported a skirmish between cavalry near Palamcottah. He was now ordered to return to Madura by 20th April, but to leave a detachment before Palamcottah. This Preston did, establishing a strong post 2,000 yards from that place. Soon after Preston's arrival Campbell attacked one of the enemy's redoubts, carried it, killed fifteen sepoys and two gunners, and wounded many. Our troops also brought off a lieutenant of artillery prisoner. The redoubt had to be abandoned, as it was too near the fort

to admit of occupation. Our loss was trifling. Bad weather and rain prevented any further attack for some days.

On 29th April, at 7 A.M., we opened with five batteries on five redoubts; and at noon Preston on one side, and Campbell on the other, carried them with a loss of twenty Europeans and many sepoys on our side. We took five guns and ten Europeans; while Captain Kirkpatrick, with his troop of Hussars and Black Horse, cut up numbers of the enemy, and pursued them to the gates of the fort. Our troops behaved well, while the enemy, although they fought under round and grape shot of the fort, showed but little resolution.

We lost	7	Europeans killed
	17	,, wounded, and
	30	sepoys killed and wounded, besides 7 horses.
Total	54	

Enemy lost 400 sepoys, 18 Europeans, 20 topasses, killed and wounded, and we took 16 Europeans and topasses prisoners.

At this time it was reported that the force in Madura consisted of 150 Europeans, and 4,000 natives. The siege of Madura was now undertaken in earnest. On 10th June we were ready to open on the fort with nearly forty pieces of cannon and mortars.

On the 14th, the enemy made a vigorous sally and upset a few empty gabions, but were repulsed with a loss of fifty. We lost Captain Smith and Lieutenant Maitland, and four Europeans killed, and ten wounded. On the 16th, we lost Lieutenant Whithear and two Europeans killed, and five wounded. By the 15th, the batteries on the crest of the glacis were nearly finished, and on the 20th the mines for blowing in the counterscarp of the ditch were sprung.

The batteries for breaching the fausse braye were also ready. The batteries had the desired effect, and it was expected that the place would be stormed on the 22nd.

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On the 20th, Mr. Hamilton of the Engineers was killed, and Ensign Bowman wounded. Owing to some intelligence received from the fort through deserters, it was thought prudent to defer attack till the 23rd. Our loss from the 22nd to the 24th inclusive, was eight Europeans killed, and two officers and thirteen wounded.

Major Campbell considered that the place ought to be stormed at once. "There were six practicable breaches in the fausse braye, good passages in the ditch, at least 500 yards of rampart ruined, and the storming party could consist of 800 Europeans and 3,000 or 4,000 sepoys."

Call considered "the walls of Madura were now assaultable; but thought assault should not take place at night as a miscarriage was possible, and would be most fatal. A lodgment should be made on the north-west bastion, and a passage, covered on the right against the flank of the west gate, should be made across the ditch." Preston and Wood (Brevet-Major) agreed with Call.

Campbell thought "assault might be immediately made with success, but deferred to opinion of the others."

On the 23rd, we failed in making an epaulement across the ditch to the breach in the fausse braye. Opinion then became unanimous, that the guns should play briskly on the 24th and 25th; also at night on the west angle, two curtains and towers adjacent; and that an assault should be made on the 26th morning. Meantime, passage of ditch was again to be attempted, and a trench, by way of deception, was to be pushed nearer the north-west gateway.

Accordingly early in the morning, the assault was made. We were repulsed with great loss. The mud in the ditch was so soft, that the troops had their arms, and most of their ammunition rendered useless, but they still went on. Preston was gallantly leading on the right, when he was struck down badly wounded. The troops, however, got up to the top of the tower

in several places; but the enemy had under cover so many men with long pikes, and threw such quantities of large stones, hand grenades, and shells down the breach, that it was found impossible (in spite of great gallantry) to gain the tops of any of the breaches, we were, therefore, forced to draw off our troops.

Our loss was very heavy. Captain Bullock, and Ensign Vashan killed; and Major Preston, Captains Kirkpatrick and Fitzgerald, and Lieutenants Wear, Owen, McDonald, and Bruce, wounded.

One hundred and twenty Europeans killed and wounded, and fifty sepoys, besides many others bruised with stones.

A second assault was proposed at once by Campbell, Call, and Wood; but the heavy rain (country flooded), and a great deal of ammunition spoilt, prevented this being carried out. It was now considered desirable not to assault Madura, but merely to blockade it very closely.

On 12th July the pioneers who had arrived from Manilla came to camp, and were busily engaged in making redoubts and a deep ditch all round the fort. The following were the engineers at the siege:—

John Call, Major.
Abram Bonjour, Director, Captain (belonging to battalion).
Edward Cotsford, Captain.
John Adams, Sub-Lieutenant.
John McLean, Sub-Lieutenant.
William Stevens, Practitioner-Engineer, and Ensign.
Charles Delavaux, Practitioner-Engineer, and Ensign.
Hamilton, Practitioner, Engineer, and Ensign (killed on 20th June).
William Toplady and W. Delafield, Extra Ensigns (belonging to battalion).

On 19th July, Verdagerry, which commanded several passes into Travancore, surrendered to Lieutenant Robert Kelly.

The blockade of Madura was strictly enforced, and by the 5th August the garrison was getting straitened for supplies, and their horses were dying, while our people were engaged in building "pandals" (huts are doubtless meant) for our army. The garrison were under these circumstances naturally extremely unhappy, especially as they had to eat their horses. Usoff Cawn became very melancholy, but still determined to hold out.

On 15th September Mr. Marchand wished to have an interview with Majors Campbell and Call. He offered to deliver up Madura and Palamcottah, on condition that we should allow Usoff Cawn, with troops and some pieces of artillery, to retire to Dindigul. There terms were, of course, refused, and he was told that nothing but surrender at discretion would be of avail. Marchand then asked if Usoff Cawn and a few of his troops would be allowed to pass. This was again answered in the negative.

Cotsford, of Engineers, was compelled by ill-health to leave about end of August.

On 17th September a letter was received from Usoff Cawn himself, asking to be allowed to pass. The terms were again rejected, and hostilities recommenced—fire being opened from our batteries. The blockade still continued very close till 13th October; on that date, about 11 P.M., Mons Perigny (formerly Engineer at St. David's) came out with a flag of truce, and a note from Mr. Marchaud, to say that he had made Usoff Cawn a prisoner, and offered to deliver up the fort. Madura was accordingly taken possession of at 6 P.M. on 14th October. Usoff Cawn and his family were taken prisoners, and the next day Usoff Cawn was hanged. Although, being a rebel, he had rendered himself liable to this fate, still, considering the gallantry displayed by him, his life might well have been spared. The incident was, it is thought, by no means creditable to us.

On the 18th, Campbell and Call set out for Palamcottah, leaving Wood to command the army.

They arrived at Palamcottah on 22nd October, and sent a summons. The Commandant immediately offered to give up the fort, and the next day it was taken possession of in good order. Call settled with the King of Travancore, who claimed certain parts of the country; but as he had given no assistance he got very little satisfaction.

Campbell and Call returned to Madura, and the campaign came to a close.

When the expedition left for Manilla in 1762, Major Call was the only engineer left in Madras. About this time John Adams and John McLean were appointed, and in 1763, William Stevens, Paul Benfield, Charles Delavaux, and Hamilton were appointed to the Engineers; so that after the return of the troops from Manilla, and the capture of Madura, the corps consisted of the following:—

Major Call.
Capt. Stevenson.
Capt. Cotsford.
Barnard.
Adams, about 1762.
McLean, appointed March 1762.
Stevens, appointed January 1764.
Benfield, appointed January 1764.
Delavaux, appointed January 1764.
Hamilton having been killed at siege of Madura.

Early in 1765 it was resolved to survey the passage between Ceylon and the mainland, and Mr. Stevens, one of the assistant engineers, was deputed for the work. About the same time Mr. Delavaux, assistant engineer, was ordered to fortify the palace, &c., at Arialore—a place about twenty-five miles north of Tanjore.

The object of surveying the passage between Ceylon, and the mainland was to enable troops to pass by a shorter cut than going round Ceylon.

The instructions given to Mr. Stevens are somewhat curious. "You must be careful not to give offence to anyone at Ramisseram, and be guarded not to give cause of complaint to the Dutch. Should they want to know your business, state that you are examining the Nabob's country, and you will be furnished with passports to that effect."

Mr. Delavaux, after completing his work at Arialore, left Woodiarpolliem, on the 20th April 1765, to join Colonel Campbell's army, and reached it on 2nd May. Mr. Stevens sent in his report regarding the channel on 22nd February. He was of opinion that no vessel above twenty tons could pass through the channel. None of the channels ever had more than four feet of water at the highest floods.

Colonel Campbell was apparently about to attack Ongole, and on 24th May an account of the fortifications was sent to him.

In June, Major Call had to examine the several Poligar works that were to be destroyed, and having done so, directed Mr. Stevens to destroy all barriers, &c.

Mr. Pybus, the resident at Masulipatam, reports on labour and material for fortifying Masulipatam, and notes that the rates for coolies are:—

				A.	P.
Men	...	...	5 dubs =	1	8
Women	...	...	3 dubs =	1	0
Boys	...	...	4 dubs =	1	4

48 dubs = 1 rupee.

Major Call was in June called upon to proceed to Masulipatam and report fully regarding the better fortifying of the place.*

All this time Mr. McLean appears to have remained as engineer at Madura. On the 21st August 1765, we learn that Captain William Stevenson, who was commanding engineer on expedition to Manilla, died, and this occasioning a vacancy of

* On 15th July, James Call was appointed an engineer.

engineer in ordinary, Mr. McLean was appointed in his place with the rank of Captain-Lieutenant, for which he is to receive twenty-four pagodas per month subsistence."

Mr. Stevens, in August, is directed to destroy the Poligar strongholds around Trivalore; and in September Major John Call is finally ordered to Masulipatam with reference to the fortifications.

Next month the Madras Government received a letter from Fort William, which stated that for some time the river had very dangerously encroached on the new fort, which induced the authorities there to ask for Major Call's services, as they entertained a high opinion of his abilities. Major Call reported on Masulipatam, but did not receive the letter ordering him to Calcutta till the day after he left Masulipatam on his return, and not seeing any prospect at that time of obtaining a sea conveyance he proposed to go in January, returning to Madras in April.

Early in 1766 the Madras Government would appear to have had great fear of Hyder Ali, who had taken in hand Mauphuz Khan, the brother of Mahomed Ali, the Nabob of the Carnatic.

Major Bonjour, on 3rd February 1766, was ordered to make a survey of the passes of Sautgadda, Damalcherry, Vencatagerry, Rampoor, Chingajedevy, Ryacotta, Cauverypatam, Hooly Durg, Cauverypoor, Suttamungalum, and nine others."

He proposed "to close those which are not essential for communication, and to make the rest redoubts and forts provided with all sorts of magazines." He considered "Rampoor important, being about size of Arcot; but of all the passes those of Damalcherry require the most attention, not only as being dangerous by their extensive roads, but by their situation." "An enemy might be in centre of the province before we would be aware of their designs."

Captain-Lieutenant John McLean was engaged at Madura on

the repairs of the works, and building new barracks for the troops up to the month of August or September, and then proceeded to Madras.

Before the close of the year he asked the Board to give him his rank on the military establishment, and on 30th December they agreed to give him a brevet of Captain, and ordered him to proceed with the army as engineer.

On 12th November 1766, General Cailland concluded a treaty with Nizam Ali, by which we were to have the Northern Circars (except Guntoor, which we were not to possess till the death of Basalut Jung). "It was also agreed that an English auxiliary force should be at the disposal of Nizam Ali," to settle the affairs of his government in everything that is right and proper; "and as he was at that time concerting with the Mahrattas a a plan for the conquest or plunder of Mysore, it was distinctly understood that this was to be the first service on which the auxiliary troops were to be employed."

Colonel Joseph Smith arrived in India in September 1766, and was selected to proceed to Hydrabad for the purpose of concerting the details of this co-operation, and commanding the troops.

Early in 1767 Lieutenant-Colonel Wood was in command of the English army in the Carnatic, and in February he instructed Captain McLean of Engineers to reconnoitre the passes with two companies of sepoys, lascars, &c. Not content, however, with this, the Board directed Major Call to go to Cuddapahnuttam to examine all the passes that may be useful for the expedition against Hyder.

He was also to communicate with "Mahade Row"* if possible. Mahade Row had, however, not the slightest intention of assisting the Nizam and the English, against Hyder. The Peishwa was first in the field, and having taken Sera, Hyder

* The Peishwa.

purchased his retreat for thirty-five lacs of rupees in the month of March. The Peishwa was now encamped near Colar, and Lieutenant-Colonel Tod and another person, on behalf of the Nizam, were sent to the Peishwa to prevail on him to persevere in the war. They were received in the Mahratta camp with ridicule, and got no satisfaction whatever.

The Mahrattas moved north on the 11th May. Meantime Major Call was inspecting the forts and passes at Palmanair, Cuddapahnattum, Vaniambaddy, and Amboor. He recommended the occupation of all the passes, and the Board ordered him to remain and instruct Major Bonjour, who was in command of a detachment of the army, how he was to act. They also sent Sergeant Hawkins with the lascars, and a lieutenant fireworker's commission for Sergeant McHuge.

Major Bonjour took Vaniambaddy at the end of April.

Major Call appears to have exerted himself greatly at this juncture, and received the thanks of the Board.

In the month of May Major Call informs "that Major Bonjour will be unable to take Gejadary and Kistnagerry, the former being very difficult of access, while the latter is well garrisoned."

At this time the engineers appear to have consisted of the following:—

Major Call, chief engineer,
Captain Cotsford,
Captain McLean,
Lieutenant Stevens,
Lieutenant Paul Benfield,
Ensign Thomas Barnard, and
Ensign McLeod.

Adams, Delavaux, and James Call appear to have died between 1765 and 1767. Of these only four appear to have been engaged on active service in the Carnatic in 1767, viz.

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Major Call, Captain McLean, and Messieurs Barnard and McLeod. Captain Cotsford and Lieutenant Stevens were engaged in the Northern Circars, and Lieutenant Benfield was at Cuddalore.

The Nizam, on 11th May, moved towards Bangalore, and the English, under Colonel Joseph Smith, marched to join him, but found the Nizam's troops departing to a distance of twelve miles, and Smith discovered that the Nizam was in correspondence with Hyder; so in spite of the Nizam's protestations, Colonel Smith moved towards his frontier, but left three battalions with field-pieces at the Nizam's request. This brigade remained with the Nizam for some little time, but was at length allowed to depart, leaving five companies. Finally these companies also, were allowed to go, three days before Nizam Ali commenced hostilities against us.

Meantime, the English moved a force into the Baramahl, from Madras, and on 25th May Major Call reported the arrival of this force at Cuddapahnuttam.

On 1st June, Major Bonjour retreated from Gegadavy to Tripatore, but on receiving reinforcements, attacked Kistnagherry, and McLean was sent to assist him.

Major Call was now re-called to settle with the Nabob regarding the Madura country, and sent Lieutenant-Colonel Tod to join Major Bonjour.

An attempt was made on the 3rd June to capture Kistnagherry by surprise. The town at the foot of the fort was occupied without any serious opposition; a petard was prepared for forcing gate of upper fort, but the men who carried it, as well as the forlorn hope, being all killed by showers of rocks, the party retired with the loss of nearly the whole of the Granadier Company.

Colonel Smith now took command of the troops in the Baramahl. Nizam Ali was on crest of hills which overlooked Baramahl, and Hyder was two days march behind.

Forces.	Cavalry.		Infantry.		Guns.
Nizam's ...	30,000	...	10,000	...	60
Hyder ...	12,860	...	18,000	...	49
	42,860	...	28,000	...	109

English Force:—

Europeans ...	30	...	800	...	16
Natives ...	—	...	5,000	...	—
Mahomed Ali	1,000	...	—	...	—
	1,030	...	5,800	...	16

On the 25th August the enemy, by surprise, took a number of cattle, &c., and on the 28th, Hyder took Cauverypatam on second day of siege.

On the 28th the English army moved towards Singarapet. Colonel Wood, with a corps of British troops, had been ordered from Trichinopolee to join Smith, by making for Trinomallee. Hyder took up a position at Cauverypooram, apparently thinking that Smith would be rash enough to attack him. Colonel Smith reached Singarapet on the 30th. Hyder followed, and harassed the British on their march towards the pass to Changama.

On 3rd September, Colonel Smith attempted the pass of Changama; he was attacked, but defeated Hyder with great loss.

Colonel Smith was, however, compelled from want of provisions to push on to Trinomallee after a short halt, which place he reached on the 4th, the troops having been twenty-seven hours without rest or food. He found no rice, and only a little "paddy."

Colonel Wood joined him on 8th September without molestation. Smith had to go out in quest of food, but returned on the 14th. He now determined to attack, but found the enemy very secure, from the interposition of a swamp.

On the 16th he moved east for food. Owing to these difficulties he called a Council of War, who agreed unanimously that Trinomally must be evacuated, the wounded and stores placed in Chettipet, two marches to north-east, and that the troops should march into cantonments at Arcot or Vellore. The Government objected to this, and Colonel Smith manœuvred about Trinomally.

Smith's army now amounted to 10,430 infantry, &c., and 1,500 very indifferent "horse." About noon on 26th September, the confederates moved a column to Colonel Smith's left, and commenced a distant cannonade.

A morass intervened, and beyond the morass a line of redoubts.

This swamp extended from a long way beyond Smith's left, to a hill beyond his right. He determined to move round this hill to the right. The enemy thought he was retreating, and they determined to cut him off. The confederates were thus marching from south-west and the English from south-east, and their advanced guards were almost in contact on their rounding the hill. The confederates tried to occupy the hill, but were repulsed by Captain Cooke.

The enemy formed. Hyder could only bring thirty pieces into battle. The English line cautiously advanced from one strong post to another, and rapidly defeated the enemy. Hyder drew off his guns in the redoubts, and asked Nizam Ali to do the same; but he refused. The British advanced in line, and the guns were then ordered to retreat, covered by Hyder's infantry. Night closed in as the English reached the last ground abandoned by the enemy, within a mile of the redoubts; having taken nine guns. Nizam Ali fled in a westerly direction through Changama Pass, and left his commander-in-chief, Racoum-ud-Dowla, to care for the retreat; while Hyder provided for the safety of his own army. During the night, an attempt was made on the enemy, under Major Fitzgerald, but it failed

through swampy nature of ground. At day-break the army was in motion, and soon passed the redoubts, which had been abandoned.

They found the road covered with the armies, and a train of artillery was still visible.

In the course of the day forty-one pieces were taken, belonging to Nizam, and fourteen more were afterwards discovered in the woods; total taken, sixty-four guns.

Loss of the English was only 150 killed and wounded, while the loss of confederates amounted to 4,000, and a large quantity of stores

Tippoo, who was plundering near Madras, joined his father at once; and Colonel Smith, having put his army under cover, went to Madras to arrange about future supplies. English army was cantoned at Conjeveram, Wandewash, and Trichinopoly.

On 12th October, Mr. Marsden, a third lieutenant in the Marine Service, was allowed to exchange from the Navy to the Engineers, being appointed practitioner engineer and ensign from 12th November.

On the 27th of the same month, Mr. Montresor arrived from England, with the rank of sub-engineer and lieutenant, and was ordered at once to proceed on service.

On 5th November, Hyder captured Tripatoor, and Vaniembaddy on the 7th, and thence moved to Amboor.

Up to the latter part of October, Captain McLean, engineer, was in charge of the garrison; but as his services were urgently required at Vellore, he was directed on the arrival of Captain Calvert's battalion to deliver over charge to that officer.

Hyder arrived before Amboor on 10th November. On the 15th, the lower fort was dismantled, and Calvert retired to summit of the hill with 500 sepoys, 1 officer, 1 sergeant, and 15 Europeans.

Finding the Killadar in correspondence with Hyder, Calvert

imprisoned him, and protracted the defence for twenty-six days. He was relieved on the 8th December by the approach of the English army.

The division of Colonel Wood was ordered to move from Trichinopoly on Trinomally, and thence to enter the Baramahl by the Changama Pass; and Smith pursued Hyder, finding him at Vaniembaddy on 8th December. Hyder retreated to Tripatore, and thence towards Cauverypatam. Colonel Smith was again reinforced by Colonel Wood. He now reconnoitred Cauverypatam, but found it was too strong—having been strengthened by redoubts during the year.

Hyder sent off his heavy guns on the 14th, and on the 18th the Nizam, with the main body of his army, reascended the Ghauts, and moved north. Hyder employed his light troops on Colonel Smith's line of supplies, and attempted in person to cut off a convoy under Captain Fitzgerald. He took with him 4,000 horse, 2,000 infantry, and eight guns; but Colonel Smith detached reinforcements, and Hyder was repulsed, having his horse shot under him. Hyder then ascended the Ghauts, and the English had again to move in opposite directions for food.

Colonel Peach meantime (sent from Bengal), had landed in the northern Circars, and had penetrated to Cummumet and Warungel, and alarmed Nizam Ali. The Nizam opened communications with Colonel Smith. Hyder discovered this, and, assuming acquiescence, they parted—the Nizam going to the north. Hyder also made pacific overtures, but being referred to Madras, thought that his advances were rejected. Negotiations with the Nizam terminated on 23rd February 1768 in a peace, and a very ignominious treaty.

Hyder now found the Moplah chiefs were rising in rebellion, so by the 20th January he re-fitted at Bangalore, and then proceeded by long marches to the west coast, took Mangalore, Honore, and Buswaing-droog, which had previously been taken by the English from Bombay; he then went to Bednore, hearing

of discontent. He levied heavy fines, and by promises to the Malabar chiefs, he received large sums of money, and withdrew his garrisons; but carefully kept Pulghaut.

Hyder did not re-commence his operations from Bangalore before August.

On 25th March 1768, field deputies were appointed to attend the army with the Nabob. They were Messrs. Call and Mackey. Mr. Holland was also appointed as an assistant. A month after this, we find the field deputies were at Arcot.

The English army had been formed into two divisions; one under Colonel Smith moved north as far as Paliconda, in the valley of Vellore, to approach the Nizam's army at Punganoor, to hasten the negotiations, and then returned to blockade Kistnagherry. The second, under Colonel Wood, reduced fortified places in Baramahl, Salem, Erode, and Coimbatore. Wood captured fifteen forts. The order of their capture was as follows:—

Tengricotta	Capitulated February 1768.
Darampoory	Taken by assault.
Salem	
Ahtoor	Surrendered
Namcul ...	
Erode	Taken by assault.
Suttiamungalum ...	
Denaikencotta	
Pass of Guzzlehutty ..	
do. Cauverypoor ...	
Coimbatore	Surrendered.
Palghaut	
Darapooram	
Aravacoorchy	
Dindigul	

On the 2nd May, Kistnagherry surrendered, and it was then published to the army that two Field Deputies were to be sent to aid (!) Colonel Smith, and Mahomed Ali (!!) was to accompany

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them; and "one of the deputies was appointed Commissary-General; thus becoming, as a member of the Government, Colonel Smith's superior; as Field Deputy, his colleague; and as Commissary-General, his inferior."

On 14th May, Colonel Smith appointed Mr. Geils (Artillery) to act as field engineer with the army.

On 8th June, Colonel Donald Campbell ascended the pass of Boodicota.

On the 10th he reduced Vencatagherry, three marches north, and sent a detachment back to reduce Peddanaik Durgum. He then went against Mulwagglo, took the lower fort, but found the upper one too strong.

Colonel Campbell opened a secret negotiation with the Killadar, who agreed to deliver it up.

Colonel Campbell moved off to Colar to facilitate matters, leaving a force in the lower fort. A stratagem was adopted. The Killadar had been told by Hyder to recruit, and he, pretending that they were deserters from the English force, let in a party of sepoys under Captain Matthews (dressed and painted like a subadar), at 4 A.M. on 23rd June, and the place was taken without loss.

On the 23rd Colonel Campbell arrived before Colar. Regular approaches were carried on to the crest of the glacis, when the fort surrendered at discretion. Lieutenant Henry Montresor, engineer, was here "shot in the arm, but the ball was extracted." Lieutenant McLeod, also of engineers, was "wounded, ball not extracted."

Meanwhile the Field Deputies and army under Smith reached Arlier, and Colonel Campbell was told to join head-quarters.

Captain Cosby was sent on 28th June to beat up Mukhdoom Sahib at Bauglore, eighteen miles south-west; but the day dawned before he came in presence of the enemy.

On 3rd July, the whole army moved by Bauglore to Oossoor.

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which fell on the 11th, and a detachment under Cosby took Anikul and Denaikencottah.

Colonel Lang was now sent to form a chain of posts, to form connection with those conquered by Colonel Wood, south of the Cauvery.

On 26th July, Mr. Lewis Smith was appointed a cadet in the Engineer corps, and was directed to proceed with Lieutenant Davis' detachment to join Colonel Smith's army.

Colonel Smith had recommended the Government to obtain the services of Morari Row, and on 4th August, at Ooscotta, Morari Row joined with 3,000 horse and 2,000 irregular infantry. Colonel Wood was also now on his way to rejoin the main army by the Tapoor Pass.

On 4th August, Hyder had entered Bangalore.

On the 9th the enemy made their first appearance to reconnoitre, and on the 22nd, Hyder attacked Morari Row's camp, but was not successful, as he lost 300 men killed and wounded, and eighty good horses, besides those hurt. Morari Row only lost eighteen men and thirty horses.

Colonel Smith's aide-de-camp, Captain Gee, was sent to inquire the reason of the disturbance, and was cut down in the dark by some of the Mahrattas. This was due to instructions of Morari Row to his men; they were ordered not to mount, but to stand at their horses' heads, and cut down any mounted man. Captain Gee was, of course, mounted, and in the dark he was taken for one of Hyder's force.

On 3rd September, Hyder attempted to cut off Colonel Wood. Mahomed Ali, with the two Field Deputies, with escort, were sent to Colar, and Colonel Smith moved to Maloor.

On the 5th it was expected Colonel Wood would be at Boodicotta, fifteen miles distant from Maloor; so Colonel Smith placed his baggage in Maloor on the 5th, and early on the 6th was on march to Boodicotta. Hyder, calculating on Colonel Smith remaining at Maloor, tried to attack Wood in a defile.

The hills were between Hyder and Colonel Smith, as well as between Colonel Smith and Colonel Wood.

Colonel Smith sent persons to top of hills for intelligence, and learnt that Colonel Wood was in sight. He saw that he could reach and clear angle of defile sooner than Hyder. He quickened his pace, and sent word across the hills to Colonel Wood. The latter very foolishly fired a salute, and Hyder immediately counter-marched.

Colonel Smith attempted a pursuit, but it was of no avail. Colonel Wood, owing to Colonel Smith's displeasure, resigned his command, and Colonel Lang took charge of his division, which was ordered to pursue Hyder in direction of Batemungalum, half-way between Vencatagherry and Colar; while Colonel Smith moved by Colar.

Pursuit was of no use, and they both returned to Colar, a post being established at Mirgomally, two marches north.

Hyder marched to Goorumconda, arranged matters with Meer Sahib, his brother-in-law, and then returned respectably reinforced to Colar, where the battering train of the English was drawn out.

Hyder now made advances for peace, and was ready to cede the Baramahl to the English, and pay ten lacs of rupees.

The English Government was unreasonable, and the negotiations failed.

Colonel Smith had previously occupied Mulwaggle with his own troops, but the Field Deputies had relieved the garrison with a company of Mahomed Ali's troops, and Hyder at once took the place.

Colonel Wood attempted to recover it, took the lower fort, but was beaten off in his attempt to escalade the rock.

On 4th October a convoy appeared to be approaching, Colonel Wood moved out with a small force to reconnoitre, was attacked by Hyder, and nearly cut off. Captain Brookes recovered the day by advancing by a circuitous route on the left flank of enemy, and then attacked, shouting, "Smith, Smith."

The belligerents both thought that Smith's division had arrived, and Hyder was as much dismayed as the English were elated. Colonel Wood's force was saved, and, in spite of some desperate attacks of Hyder, remained in possession of the field.

Hyder lost 1,000, while that of the English was eight officers and 229 men, with two guns.

Both forces had expended nearly all their ammunition.

Colonel Smith was at Colar when he heard of this on the 6th, and early on the 7th encamped at Mulwaggle.

On the 14th both divisions were in motion to the north, and tried to bring Hyder to a general action. Hyder harassed each division with his light troops, made a circuitous movement, and on 5th November alarmed the Field Deputies, and Mahömed Ali at Colar. Colonel Campbell was in command, and Hyder, finding his arrangements for defence judicious, retired on the 7th.

Colonel Smith returned on the 8th, under heavy rain. He was then directed to proceed to Madras to give his advice (it was thought by many that he was recalled, so that Wood might command the army), and on the 14th November the Nabob, the Field Deputies, and Colonel Smith left under escort, accompanied by Morari Row.

During this period, in addition to Colonel Call,* who was one of the Field Deputies, the engineers with the army were Lieutenant Geils, Lieutenant Montresor, and Ensign Marsden.

Captain McLean was shot through the head at Tingricottah, on 12th February 1768; and Lieutenant McLeod, it is presumed, died from effects of wound received on 2nd July the same year, as no further mention of him can be found.

Cotsford and Stevens were in the north, the forming acting as Resident of Ganjam, and as such, assisting Colonel Peach in command of Bengal troops; while the latter was employed in

* Date of colonelcy by brevet, 10th April 1765.

strengthening forts at Ellore, Masulipatam, Bezwada, Rajahmundry, and Samulcottah. Mr. Paul Benfield is not mentioned, but it is likely he also was with the army.

Colonel Smith's division moved east of Colar, and hearing that Hyder was besieging Oossoor, Colonel Wood's division was reinforced by 2nd Regiment of Europeans, and Captain Cosby's sepoys, with a view to relieve the place. Colonel Smith's division, under Major Fitzgerald, remained at Vencatagherry to cover the movement of the Nabob. Colonel Wood marched to relieve Oossoor on the 16th, reached Bauglore on the 17th, left his baggage, &c. in the pettah, and at 10 P.M. moved towards Oossoor arriving 7 A.M. on the 18th. He intended to have made a night attack, but was thus foiled.

Hyder remained north-west of fort till Wood's advance was entering Oossoor. Meantime Hyder's infantry got between them, and Bauglore. About 2 P.M. repeated discharges of cannon were heard, which obliged Colonel Wood to retrace his steps. Bauglore was garrisoned by one of the best of Mahomed Ali's corps, commanded by Captain Alexander. Hyder approached in several columns. Captain Alexander attempted to preserve two 18-pounders which had been left by Colonel Wood, but was obliged to retreat into the small fort. The enemy entered the pettah, and the camp-followers and inhabitants tried to get into the fort; but the gate was shut, and then followed a dreadful scene, people and cattle crushed to death in hundreds. Hyder made no attempt on the fort, but took the 18 pounders, and all the baggage, and sent them to Baugalore. When Wood returned, Hyder was nearly out of sight.

The loss sustained was 2,000 people, 2,000 cattle, two 18-pounders, and nearly all the stores, baggage, and camp equipage. On the 20th, Wood returned to Oossoor, and on the 21st again to Bauglore, and same evening to Arlier. Hyder re-appeared on the 22nd, and opened a cannonade, which Wood attempted to return. Hyder made a show of retiring, and at

10 P.M. Wood resumed his march, when Hyder attacked, and continued to do so throughout the night, and next morning.

Colonel Wood's ammunition began to fail when, about noon, Hyder drew off, and retreated south-east. This was caused by approach of Major Fitzgerald, who had made a forced march from Vencatagherry.

Fitzgerald wanted to follow Hyder to Bangalore; but Wood objected, the troops being insufficient. Fitzgerald addressed a public representation to Colonel Smith that Wood ought to be removed. The Government ordered Wood to proceed in arrest to Madras, and Colonel Lang took command early in December.

Fuzzul-ulla-Khan, commandant of Bangalore, had been sent by Hyder to Seringapatam. With 7,000 men, and ten guns he took all the English posts on the Coimbatore side, and completed his descent by 4th December.

On the 6th Hyder descended east into the Baramahl by pass of Palicode, and thence south through pass of Tapoor. Colonel Lang sent a division under Major Fitzgerald on 10th in same direction (5,000 men), and Colonel Lang found himself under the wall of Vencatagherry with 370 Europeans and 900 sepoys, two 6-pounders, one 3-pounder, and two howitzers.

Colonel Lang was now directed to withdraw the battering train from Colar, but a garrison was left there under Captain Kelly.

The posts in Salem and Baramahl fell without difficulty to Hyder, and Fitzgerald was not in time to relieve any of them.

As Fitzgerald approached the Cauvery, he learnt that Hyder was about to cross near Caroor, and was going to Trichinopoly and Tanjore. Fitzgerald resolved to cover Trichinopoly, and inclined to the east. Hyder then went in the opposite direction, took Caroor and Erode, and then marched against Cauverypatam.

It was commanded by Captain Faisan.

He had been besieged for a month by Fuzzel-ulla-Khan; after a protracted defence he capitulated, being reduced to the last extremity for want of provisions.

Thus closed the year 1768. Hyder had recovered, in three weeks after his descent, the whole of the possessions which had been wrested from him in two campaigns, except Colar, Vencatagherry, and Kistnagherry.

Fuzzel-ulla-Khan was now sent to operate from Dindigul upon Madura and Tinnevelly; while Hyder recrossed the Cauvery, and marched to east along the north bank.

Fitzgerald was at Munsoorpett opposite Trichinopoly. He marched farther north to place himself between Hyder and Madras. Hyder crossed to south-east in rear of Fitzgerald, and levied four lacs of rupees from Tanjore.

The Government now made advances for peace. Hyder returned a suitable answer, and Captain Brooke was sent to him. Captain Brooke reported the result, and the Madras Government sent him again with an outline of the terms. These, however, were positively rejected; but Hyder said he was still ready to receive a man of rank, with reasonable proposals, and full powers. The Government accordingly sent Mr. Andrews and Colonel Smith once more assumed command of the army, which was directed to re-unite on Chettapet. Colonel Smith assumed command on 1st February, and Mr. Andrews passed to Hyder's camp on the 14th.

On the 22nd, Mr. Andrews agreed to a cessation of arms for twelve days, and proceeded to Madras to report Hyder's ultimatum.

Before the campaign proceeds further, notice may be taken of the proposed changes in the Engineers.

It was shortly intended to thoroughly re-organise the corps, by obtaining some officers from England, and place it entirely on a military footing.

Accordingly all the engineers were called upon to make their choice regarding their resigning, or remaining in the corps.

Colonel Call sent in the answers of the engineers as follows:—

Call himself, intended to quit India on account of his health. He was requested to continue as Chief Engineer as long as he remained.

Cotsford chose the Civil Service, and was appointed Resident at Ganjam.

Paul Benfield, the Civil List.

William Stevens, to remain in the Engineer Corps.

Henry Montresor requested to be continued in the Military Line.

Barnard, to be retained on Civil List.

Thomas Marsden wished to continue on the Engineering List.

Mr. William Stevens was appointed Sub-Director, and Captain, from 26th January, and

Mr. Thomas Marsden, Sub-Engineer, and Lieutenant, from the same date.

To resume. Hyder's proposals were rejected, and hostilities were resumed on the 6th March.

Colonel Smith manœuvred very skilfully, and more than once, in his manœuvres between Ginjee, and Madras involved Hyder in perplexity, and repeatedly out-manœuvred him.

These movements had brought the armies 140 miles south of Madras. Hyder sent off all his army, except 6,000 chosen horse, and 200 infantry, to retire through pass of Ahtoor, while he himself with his chosen body marched 130 miles in three and a half days, and on 29th March appeared within five miles of Madras, to the consternation of the English Government.

On the 23rd, Smith reinforced Lang's division, and sent him in direction of Thiagur, and Trinomallee, with orders to take post at either, and to act on the communications of the enemy with the passes of Ahtoor, and Changama.

When Smith heard of Hyder's movement, he ordered Lang to attack, while they were in the pass; but Lang found his force quite insufficient for an attack on Hyder's main army.

Colonel Smith followed with celerity, and early on 31st was met ten miles from his camp with an order to halt whenever the letter might reach him. Hyder, finding Smith was so close, said he could not negotiate with his army so near; so Smith, on 1st April, was ordered to retire. He sent word he would move on 2nd. Hyder finding he did not move on 1st, moved to the north early on 2nd; and Government, alarmed for Black Town, ordered Smith to march north, or to Madras, whichever he might deem expedient. Smith obeyed with alacrity, but had not moved half way, when he was ordered again to halt.

The treaty with Hyder was concluded the same evening, and executed the following day.

CHAPTER V.

Black Town fortified.—Army sent against Tanjore.—Capture of Vellum.—Vellum occupied.—Siege of Tanjore.—Engineers suffer heavily.—Montresor wounded.—Colonel Ross wounded.—Dispute as to right of engineers to take rank in the army.—Force sent to reduce Ramnad.—Ramnad stormed.—The Poligar killed.—Montresor appointed to the infantry.—Campbell killed.—Montresor dies.—Tanjore assaulted and captured.—Nagore taken.—Survey of Northern Circars.—Corps of Guides raised.—Dispute about rank of engineers.—Artillery located at St. Thomas' Mount.—Chief Engineer complains against Captain Dugood.—Bound hedge for Madras.—Memorial of Engineers to Commander-in-Chief.—Tanjore restored to the Raja.—Paul Benfield.—Lieutenant Robert Schoular appointed surveyor.—Vellum destroyed.—Complaint of Chief Engineer.—Lieut.-Colonel Cosby commands a force against Rajah of Carvetnuggur.—War with France.—Siege of Pondicherry.—Major Stevens, Chief Engineer, killed.—Pondicherry delivered up, 19th October 1778.—Captain Maule remarks on Major Stevens.—Siege of Mahé.—Mahé captured.—Forts destroyed.—Geils distinguished at Pondicherry.—Sea-face of Fort St. George.—Full batta.

Colonel Call, on 13th March 1769, had represented the necessity of fortifying Black Town.

He proposed a simple enclosure, composed of bastions and curtains, varying in their size and length according to the nature of the ground. The angles made by the prolongations of the curtain to be very obtuse. He went into considerable detail as regards method of carrying out the work, &c. &c.

Early in the year the Chief Engineer was called upon to survey the country round Madras, and during the whole of this

year all the engineers appear to have been employed in similar duties, as no military expeditions were undertaken.

John Call[*] left Madras for England in early part of the year, and Henry Montresor[†] took charge of the works at Madras in his place. While so engaged he sent in a chart of India, and the Board complimented him on his great merit and abilities, and gave him a commission as Sub-Director and Captain of Engineers, to rank from June 1770.

In July, Montresor recommended that Pigot's and Lawrence's bastions, Fort St. George, should be rebuilt, and St. George's ravelin erected. The two bastions were in a very ruinous state. He estimated the cost at 143,500 pagodas. Mr. Benfield was recommended as contractor.

The Board agreed to Montresor's proposal, and blamed John Brohier for weakening the works by deepening the ditch.

On 23rd March 1770, the Court of Directors ordered that the establishment of engineers should consist of:—

- 1 Chief Engineer, with rank of Lieutenant-Colonel.
- 1 Director, with rank of Major.
- 3 Sub-Directors, with rank of Captain.
- 2 Sub-Engineers, with rank of Lieutenant.
- 2 Practitioner Engineers, with rank of Ensigns.

They applied to the Board of Ordnance for an officer of Royal Engineers, and Patrick Ross[‡], then a captain-lieutenant of

[*] He was eldest son of John Call, Esq., of Launcels, county of Cornwall. After retirement from the Company's service he entered Parliament—being subsequently appointed one of the Commissioners to inquire into the state and management of Crown lands. He was created a baronet on 28th July 1791. He married 28th March 1772, Philadelphia, third daughter and co-heir of William Batty, M.D., by whom he had a family. He died 1st March 1801.

[†] On 10th June 1769, Mr. Henry Montresor reported himself fit for duty, and he was appointed to superintend the works at Madras.

[‡] He appears to have joined the Royal Engineers in 1757 as sub-engineer and lieutenant. In 1761-62 he was stationed at Guadeloupe and Martinique. Guadeloupe was taken from the French in January 1759, but the complete conquest of the island was not effected till May. On 4th January 1762, when Ross was

nineteen years' standing, was placed at their disposal as Chief Engineer.

Lieutenant-Colonel Ross arrived at Madras on, or about, the 15th September, and the Corps of Engineers consisted of the following officers:—

Patrick Ross, Principal, and Lieutenant-Colonel, 15th September 1770.

Archibald Mitchell, Director, and Major, 15th September 1770.

William Stevens, Sub-Director, and Captain, 26th January 1769.

Henry Montresor, Sub-Director, and Captain, 25th June 1770.

Philip Pittman, Sub-Director, and Captain, 15th September 1770.

William Campbell, Sub-Director, and Captain, 15th September 1770.

Thomas Marsden, Sub-Engineer, and Lieutenant, 26th January 1769.

at Guadaloupe, war was declared between Great Britain and Spain. On 6th June 1762 our fleet under Admiral Pocock, K.C.B., appeared before Havana. The castle of El Moro (which commanded the harbour) was built on a rock of great height, and fortified with batteries of heaviest artillery then known. It was stormed on 30th July. On 11th August the Governor hung out a flag of truce, and on the 14th we took possession.

The army consisted of 14,000 men under the Earl of Albemarle. Our losses were very heavy. The army alone lost 1,800, and the losses in the fleet, though less, were yet very considerable. This capture of the Havana was effected less than two months before Manilla was captured by us under General Draper.

In 1763 Ross was still a sub-engineer, and next year we find him named as extraordinary engineer with, it is presumed, the rank of Captain-Lieutenant.

It is likely that Ross was engaged on active service in this war, which came to an end on 10th February 1763, the date of the Treaty of Paris. This was the era of England's greatest prosperity. We conquered Canada, Cape Breton, and St. John, as well as Cuba; at the Peace, Martinique, Guadaloupe, Marie Galante Desuada and St. Lucia were given back to France. England retaining Grenada, Grenadines, St. Vincent, Dominica, and Tobago.

Martinique was captured on 3rd February 1762.

George Lewis Wittever, Sub-Engineer, and Lieutenant, 15th September 1770.

George Maule, Practitioner Engineer and Ensign, 31st August 1770.

With the exception of Stevens, Montresor, and Marsden, all these came from England.

Montresor, having been appointed Captain before the orders for forming the establishment* were received, was made a supernumerary.

Stevens had joined as Ensign on 7th January 1764,
Montresor as Lieutenant on 8th September 1767, and
Marsden as Ensign on 12th November 1767.*

The establishment allowed for two ensigns, but only one was appointed.†

The Chief Engineer was directed to remain at the Presidency with two captains, one lieutenant, and one ensign; while the Director or Major was ordered to the Northern Circars, with two captains, one lieutenant, and one ensign to assist him.

The Chief Engineer was made a member of the Board, and Captain Montresor, who had previously been appointed, was also to remain as a member.

Before the close of November, Lieutenant-Colonel Ross sent in a plan for an arsenal. The estimate amounted to the modest sum of 9,327 pagodas, or about 37,000 rupees.

Engineers with the army at this time were Captain Montresor and two subalterns.

In 1770–71 Hyder was engaged in war with the Mahrattas. The Rajah of Tanjore had previously paid tribute to the Nabob of the Carnatic. Encouraged by the vicinity of the Mahrattas

* Alexander Mitchell (Major Mitchell's brother) was appointed, 25th January 1771, Practitioner-Engineer and Ensign, to make up the establishment.

† Thomas Marsden died at Tripassoor on 19th March 1771, and George Maule was appointed Lieutenant in his place; Alexander Dugood, who came out in the military line in 1768, was appointed to fill up the vacancy in ensigns.

(his own countrymen), the Rajah resisted the demand. The Nabob required from the British Government an army to enforce it. After some hesitation, which arose from doubts as to who was to meet the expenses, his request was granted. The Raja paid the Mahratta commander five lacs of rupees, obtaining in consideration a promise of assistance.

Trimbuck Row, the Mahratta chief, threatened with a considerable force to descend into the province of Arcot; but a payment of four lacs by Mahomed Ali to Trimbuck Row put a stop to this movement.

It was not till September 1771, that an army was sent against Tanjore, under Colonel Joseph Smith. The army assembled at Trichinopoly, arrived at Vellum at 10 A.M. on 18th September, and was soon visited by the Tanjore cavalry. Rain fell for two hours. As soon as weather cleared, we advanced with Matthews' cavalry, and Corps of Grenadiers. "The instant we began to speak from the mouths of our sixes, they (Tanjore Cavalry) set out for Tanjore."

We moved down and occupied the pettah. The fort was regular, compact, strong, and garrisoned by 1,000 sepoys, 200 topasses, &c. A battery of six 18-pounders was erected, and opened against Vellum on 20th September. By night a breach was made, but it was not deemed practicable by the engineers. On this day Lieutenant-Colonel Ross, Captain Campbell, and Mr. Maule, all of the Engineers, joined the army. At midnight on the 20th, Colonel Bonjour was ordered to advance to the breach with some Europeans, and a battalion of sepoys.

He found the fort deserted, and opened one of the gates.

On 23rd September the army marched and encamped before Tanjore, three miles E. by S. On the fall of Vellum the Rajah ordered the pettah to be evacuated, broke up his camp, and marched into the fort, leaving only his cavalry in the field.

Colonel Flint was posted with Europeans and grenadier

sepoys at a mosque in the pettah, 800 yards from the fort, and a company of sepoys at a village in their front.

On the 23rd and 24th, the engineers reconnoitred, and their people prepared fascines and gabions.

It was determined to attack the south-west angle, and the army moved nearer to the fort.

We broke ground on 29th September, and a battery was raised for six heavy guns, and two 12-pounders, also one 10-inch, and two 8 inch mortars, to ruin the defences of the front attacked.

This battery was opened on 2nd October, but was not found to have the desired effect, and Colonel Ross then advanced a trench to a water-course 250 yards in front of it; and on the side of it nearest to the fort erected another battery of ten guns, 370 yards from the walls.

This opened fire on the 11th. The enemy kept up a brisk fire, which killed and wounded many of our men.

On 7th October, at night, Colonel Ross was wounded on the cheek-bone by a musket-ball, and Captain Montresor took command of the engineers for a short time; but before the 20th, Colonel Ross was again on the works.

From the advanced battery, a sap was carried on to the crest of the glacis.

It was commenced on the 13th. The weather was very unfavourable for the besiegers—heavy rain every afternoon, and the greater part of the night.

On the 14th night, Captain Campbell was wounded through both thighs, but the bones were not hurt. The fort kept up as heavy a fire as we did, and it was considered by Colonel Smith that "whoever had the direction of their works, and defending them, was neither deficient in knowledge nor activity."

On the 15th, our approaches were carried within twenty paces of the covered way, and on the 17th they had reached the crest,

and the Engineers were busied in forming a battery to breach the outer wall, which was of stone, very high, and the ditch more than twenty-four feet deep.

On the 20th (Colonel Ross wrote):—

"We have now sunk a shaft within a few feet of the crest of the glacis, and are carrying on our galleries in order to place our mines, so as to blow in enough of the counterscarp to make the descent into the ditch easy; and we are at the same time sinking a four gun battery in the glacis, whose embrasures are to be cut out of it, in order to batter the fausse-braye wall as low as possible—the wall of the body of the place being already destroyed."

On same date Colonel Smith says in a letter: "The soil is very hard, and it will take time; our engineers are too sanguine. Colonel Ross is again abroad; and Montresor, from a musket-ball that went through his hat and grazed his head, but did not break the skin, is much indisposed. Captain Campbell is wounded through both thighs. Lieutenant Geils, a very active young gentleman, is shot in the head, and Lieutenant Bonneveaux in the arm. In short, scarce one in that corps has escaped. Lieutenant Wittever is sick, and only Mr Maule remains."

On the 24th, the engineers reported that the mine for making descent into the ditch, would be ready next day.

"The 10-gun battery began to play this morning to the right of breach. It rained a great part of the day. The 4-gun battery in covered way is to open on fausse-braye wall at midnight, as the engineers report that the mine by that time will be loaded and secured, so as to receive no damage from shock of firing."

"The 10-gun battery will continue to enlarge the breach. It is believed the enemy have made a retrenchment behind the breach."

"25th.—The 4-gun battery could not be opened till

11 A.M., as the mine was not secured till that time, on account of a spring which interrupted the miners; however, a brisk fire has been kept up from the 10 and 4-gun batteries, and will be continued till the breach is practicable."

"26th.—The guns from both batteries firing night and day, and the 4-gun battery has not made the impression on fausse-braye wall that was expected. The garrison keep up a very hot fire, and we lose both Europeans and sepoys every day."

On the 27th, General Smith received a letter from the Nabob, informing that he had signed articles of peace in consequence of the Raja accepting terms offered; and hostilities at once ceased.

On the 27th, the engineers had reported that the breach would be practicable by next morning, both in the fort and fausse-braye, and it was resolved to spring the mine to open a passage into the ditch; but before this could be done, Colonel Smith received the letter before mentioned.

"During the siege there were frequent sallies; they were always repulsed, but not without some loss."*

"The besieged kept up an incessant fire from the fort ever since we came before it (till the peace was made), both from musketry and artillery—particularly with the 18 and 24-pounders taken from General Lally, and it is my (Colonel Smith's) astonishment how their magazines held out."

"I was under the necessity of forming a pioneer company of Europeans from the different corps, which was commanded by Captain Wolf during the siege. A body of miners was also formed under Lieutenant Barrow. Both these small corps were indefatigable in their duty, and showed the utmost spirit and activity on every occasion." "Two breaches were nearly practicable at the time the Nabob settled matters with the Rajah. The

* On 1st October enemy made a very spirited sally on our works, but it failed although very resolutely pushed from half past 10 to 3. Enemy lost seven jemadars and 100 horsemen killed, 200 horses killed and 200 wounded.

officers, &c., think that circumstances alone will be sufficient * to plead for them, as it was in consequence of the dread of our arms, and being on the crest of the glacis, that obliged the Rajah to comply with the young Nabob's demands." "Captain Montresor, who carries this packet to the Honourable Board, will also deliver to you a plan of Vellum; and I cannot, in justice to this gentleman's character, avoid assuring your Honour, &c., that he has behaved during this siege with great activity, zeal and spirit, and as a good and deserving officer. Colonel Ross received a bad wound in his cheek, but was so fortunate as to be able to go soon abroad again, and attend to his duty.

"He has been extremely active and diligent since his arrival in camp, so indeed have all the gentlemen acting under the Engineer."

Return of killed and wounded from date of leaving Trichinopoly to 28th October 1771 :—

	Killed.	Wounded.
European Cavalry ...	2	—
Artillery	8	31
Infantry	31	94
Sepoys	86	195
	127	320

Besides 2 officers killed and 16 wounded; also 6 of Nabob's troops killed, and 30 wounded, with 8 lascars killed and 37 wounded.

Grand Total—Killed	143
" Wounded	403
	546

* The Nabob had promised to present the army with seven lacs of rupees, if it succeeded against Tanjore.

Engineer Officers:—

Lieutenant Colonel Ross	Wounded.
Captain Campbell	do.
Lieutenant Geils (Artillery) acting as Engineer	do.
Lieutenants Bonneveaux, (2nd Regiment), acting as Engineer ..	do.

Infantry Officers:—

Lieutenants Weld (2nd Regiment) and Nicol (Sepoy Regiment)	Killed.

Artillery:—

Captain Mathew Horne	Wounded.
Lieutenant McHugo	do.
„ Clawson	do.
„ Judson	do.
„ Douglas	do.
„ Darrell (2nd Regiment)	do.

Sepoy Regiments:—

Lieutenant Barton	Wounded.
„ Campbell	do.
„ Davis	do.
„ Huckey	do.
Captain McKenzie	do.
Ensign Dixon	do.

In this year, a great dispute arose as to the right of the engineers to take rank and command in the army.

The engineers, nine in number, sent in a lengthy joint remonstrance, and requested that their representation of the state of the corps might be transmitted to the Court of Directors. The Board decided that, by the express words of the commissions granted to the engineers, they had a right of commanding in the field or garrison according to their respective ranks.

Towards the end of November 1771, Lieutenant Colonel Ross

was sent to Vellum to report on necessary works to put the fort in proper order; and he was directed not to interfere with the garrison, but to confine his attention solely to the service on which he was employed.

Major Mitchell and Captain Stevens, with Mr. Mitchell, were engaged in the Northern Circars during this year.

In March 1772, a force was assembled near Trichinopoly, under Colonel Smith, to reduce Ramnad.

The Ramnad country was entered in the month of May.

On 20th April, Captain Pittman was appointed to proceed with the troops as engineer. Lieutenants Geils and Maule were also with the army.

Although a monthly journal of the operations was sent in, as well as a sketch of the country through which the army marched, they could not be found, and so details of the movements are wanting. The army appears to have marched from Trichinopoly by Sathrum, Veerumalai and Nathum, to Madura, and then, it is presumed, down the valley of the Vygah to Ramnad, a distance of about 150 miles.

Towards the end of May, the army appeared before Ramnad, and the engineers at once commenced to make preparations for the siege.

On 1st June, a battery for two 12-pounders was finished, for enfilading the face attacked, and on the 2nd another for four 18-pounders was completed to form a breach; a few days after, Ramnad was stormed.

After the capture of Ramnad, the force marched into the little Marawar country, and encamped before the barrier leading to Calliacoil,* the Rajah's stronghold. A detour was made with a strong force to the enemy's rear, under Lieutenant-Colonel Bonjour; the enemy were completely surprised, and Calliacoil was entered.

* Calliacoil is about ten miles east of Shevagunga.

The enemy were dispersed with severe loss, the Poligar being killed, and the campaign was brought to a close.

On 9th November 1772, Captain Montresor was appointed to the infantry at his own request, after having surveyed the road from Suthram, Nathum, Trichinopoly and Veeramalai, which was required to complete the chart of routes of the army on the Marawar expedition, drawn by Captain Pittman.

"The intestine commotions of the Mahratta State in 1773 suggested to Mahomed Ali the present moment as the most favourable for realising his long-projected design of possessing the government and territory of Tanjore."

In July 1773, a force was assembled at Trichinopoly for the reduction of Tanjore. General Smith again commanded.

The army marched on 31st July, and encamped on left of Sugar-loaf Rock; left again on 2nd August, reached Gingarputty on the 4th, and Vellum on the 5th; Tanjore in front six miles east-north-east.

The Tanjoreans were encamped north of the fort. On the 6th, at 3 A.M., General Smith marched with a detachment of the army, accompanied by the chief engineer, Lieutenant-Colonel Ross, to reconnoitre ground round Tanjore. At daylight they discovered enemy's tents, and part of their cavalry encamped close under the walls. Reconnoitred till noon, and returned to Monajee's tope.

The Tanjore cavalry, 1,500 to 2,000 strong, moved out two and a half miles from fort. Captain Rumley with the cavalry was ordered to charge. He routed and pursued them, inflicting a loss of fully 100 killed and wounded.

In the afternoon of the same day, we marched to Queen's Choultry.

By 20th August we had broken ground, and had advanced Lieutenant-Colonel Vaughan to a commanding spot on west side, where there were two pagodas, 850 yards apart; and our working parties were running a parallel from one to the other

about 700 yards from the walls. Our loss in this transaction was inconsiderable. Major Fletcher marched at 9 P.M. to attack the enemy on east side of the fort.

21st.—The engineers continued their parallel north along the west face, for a distance of 400 yards, and on the 22nd it was lengthened by 220 yards.

On 23rd August it was carried still further, and it was intended to erect a redoubt on the left, but that night there was not sufficient time. The enemy made an attack on the trenches, but were repulsed.

On this day we got possession of two pagodas about 300 yards north of the North Gate.

Captain W. Campbell, of the Engineers, was killed on the 24th.

"Lieutenant-Colonel Ross, Captain Campbell, his brother, and Lieutenant Fletcher, with the Pioneer Company, left our post at the pagodas, and were on their way to the trenches which had been attacked in the morning, when Captain Campbell was shot through the head, and one of the pioneers killed." General Smith in his despatch remarked, "I am much concerned for poor Campbell; he was a very good man."*

"By the 26th, our guns, mortars and howitzers were sent to the batteries. All this time, an incessant fire was kept up by the enemy, without our returning a shot from our batteries."

"Colonel Bonjour and Major Horne offered their services to assist the engineers. Lieutenant Barrow, while engaged assisting the former, was killed by a cannon-shot."

"At 6 A.M. on the 27th, our batteries opened fire from seven 18-pounders, seven 12-pounders, and eight mortars and howitzers."

"By 11 A.M. we had silenced the enemy's guns, except an 18 and a 21-pounder on south-west angle. A battery was constructed to dismount these"

* Promotions in consequence of Campbell's death: George Maule to be Captain, Alexander Dugood to be Lieutenant.

"A secure post was established at Munnarcoil Pagoda on Negapatam Road, three miles in front of the East Gate."

"On the 31st, a trench was run from our approaches, 120 yards, nearly parallel, to the covered way, and about 250 yards from the walls to a rising ground on the left, where a battery for four guns was begun."

"On 1st September, the battery was finished with exception of platforms; and on the 2nd, another battery for guns was commenced, with a trench of communication; enemy still keeping up a fire from ten or twelve guns."

"By 5th September, the approaches had been carried to the crest of the glacis."

"On the 7th, our line of communications extended along the glacis as far as was necessary, and a return was made to secure our left."

"The ditch was ascertained to be 150 feet wide, and three and a half feet deep."

"Covered way six feet high, and fifteen feet broad. Half the ditch next to us was dry, and the water, mud, and weeds six feet deep."

"From the 7th to the 12th, the engineers were going on with their batteries, and the descent into the ditch; the latter by a gallery under the glacis."

"On the 11th, the Tanjoreans marched out to attack the post on the east, but they were repulsed."

"On the 10th, the sap battery was being constructed; it was not to be opened out, till everything was ready to fill up the ditch. Three Europeans were this day killed by one of our own shells; one had about two pounds of iron taken out of his hip."

"11th.—Miners going on with descent into the ditch. Materials for filling up the ditch in great forwardness."

"13th.—Sap battery of eight guns finished this night."

Captain Montresor had been dangerously ill for a few days.

and died at 1 P.M. He was stated to have been "a good officer, and a loss to the service."

He had been lately transferred to the infantry at his own wish. He came out with rank of lieutenant, and was an engineer officer for five years.

"14th.—Began to breach this morning at daylight from two 4-gun batteries, in front of the parallel. Sap battery of eight guns opened in the afternoon."

"On the 16th, a passage twelve feet wide was completed across the ditch."

"On the 17th, the Chief Engineer having reported the breach practicable, the storming party made the assault, and by 1 P.M. union flags were flying on the enemy's cavaliers, and four companies of British Grenadiers, and six battalions of sepoys were in possession of the town."

The attacking party was commanded by Lieutenant-Colonel Vaughan.

Our losses during the siege were 6 officers killed, besides 4 who died, and 14 wounded; 16 Europeans killed, 50 wounded; native troops, 29 killed and 74 wounded. Total 193.

Extract from General Smith's letter:—

"Lieutenant-Colonel Ross, our chief engineer, has great merit. Our works were carried on with spirit, security and judgment, and the officers of the highest rank in this army say they were the best they had ever seen in this country; and I have also the pleasure to say, with justice to all the officers and men on this expedition, that they have exerted themselves in the discharge of their duty with the utmost spirit and alacrity, so as to recommend them to the favour of the Honourable Board."

From the 17th to the 27th, the engineers were employed in surveying and levelling the trenches, and clearing away the passage over the ditch; and on the latter date Lieutenant-Colonel Ross sent in a letter with survey of attack of Tanjore.

Engineer officers present at Tanjore 1773:—Lieutenant-

Colonel Ross, Captains Campbell and Maule, Lieutenants Mitchell and Dugood, and Assistant-Engineer Lieutenant Geils.

Lieutenant G. L. Wittever, Engineers, died 11th June 1773.

By 11th October, army had reached Trivellore, fourteen miles from Negapatam, and about 21st October they took possession of Nagore, and the troops cantoned there on 27th.

On 12th November, General Smith returned from the army, and took his seat at the Board. Lieutenant-Colonel Ross accompanied the army to Nagore, and made a survey of the place.

While Tanjore was being besieged, the Dutch at Negapatam took possession of Nagore, a seaport of Tanjore.

The Nabob asked for assistance to expel the Dutch. The Presidency were unwilling at first to give it, as it might be considered a violation of treaties between English and Dutch. However, Sir Robert Harland, H.M.'s plenipotentiary, approved of assistance being given, and our troops at length marched. The Nabob's troops were placed in front, and those of the Company's were only to assist in case of necessity, so as to seem not to have acted against the Dutch. The Dutch, however, relinquished the territory and town of Nagore, upon the Nabob replacing the money paid by them to the Raja.

Captains Pittman and Stevens were during this year employed on the survey of the Northern Circars; Captain Pittman working from Vizagapatam south, and Captain Stevens north from Masulipatam.

In March 1774, Major Mitchell resigned; Captain Stevens was promoted to Major, Lieutenant Alexander Mitchell to Captain, John Theobald to Lieutenant, and James Johnson and George Banks to Ensigns.

In October, Ensign John Munro was appointed to act as engineer at Ganjam.

Up to this time it appears that the Chief engineer had the privilege of corresponding with the Court of Directors, but on

the 13th September he was ordered only to do so through the President and Council.

General Smith, in April recommended that a corps of guides should be raised to survey roads and passes in the Carnatic, and Lieutenant Geils was appointed to command it.

The dispute about the rank of the engineers still continued. The Board said—"We are ordered to give rank in the army to the Corps of Engineers, agreeably to the dates of their commissions, in the same manner as the Corps of Engineers in H.M.'s army, but that they shall rise only in their ranks in their own corps."

Lieutenant-General Clavering, of Bengal, was asked for his opinion.

On 18th February 1775, Lieutenant-Colonel Ross received a letter from Lieutenant Colonel Lillyman, of Corps of Engineers at Calcutta, saying that General Clavering had issued orders for the Engineers to take rank with the army generally, according to the dates of their commissions.

On 28th March 1775, St. Thomas' Mount was first fixed on as a station for the Artillery. "The Board are concerned to learn that the Company's Artillery cannot be located at Tripamadore. General Smith to consult with Colonel James (Principal Artillery Officer) on the properest place at the Mount for erecting sheds for them." The Chief Engineer, Lieutenant-Colonel Ross, with the officers of Artillery, selected the spot for the Artillery bungalows, and on 25th April the former sent in a plan.

In August, the Chief Engineer made a complaint against Captain Dugood, of the Engineers*; a Board assembled to enquire into it, and the result was that Captain Dugood was placed under arrest and brought before a general court-martial on the following charges:—

1st. Neglect of duty.

* Dugood was appointed Captain; James Johnson Lieutenant; and W. Gent Ensign in room of Captain Pittman, who died March 1775.

2nd. For having observed a conduct and conversation tending to the prejudice of good order and military discipline.

3rd. For having attempted, by means unbecoming the character of an officer and gentleman, to injure the character of Lieutenant-Colonel Ross, particularly in a representation to the Honourable the Governor in Council.

We learn later on that Captain Dugood was found "Not guilty" of any of the instances of the charge.

The Chief Engineer recommended that a bound hedge should be made round Madras, from St. Thomé to the north of Black Town, composed of palmirahs, bamboos, calderas, milk hedge, prickly thorn, &c., and he was directed to mark it out at once.

This year a great deal of work appears to have been done to the fort. In fact, it was about this period that Fort St. George took its present form. The works seem to have been pushed forward with considerable vigour. In April, the average number of people employed on the works was 2,700, and by the middle of June the number had risen to nearly 3,200. The works were continued throughout the year, but the numbers of those employed gradually diminished, so that in December only 1,300 were engaged on it.

In July of this year it is mentioned in the records that the Chief Engineer inspected Captain Baker's wells north of Black Town. The wells here alluded to are those now named "Seven Wells" and used for supply of fort.

In October, memorials of field officers of Artillery, and Engineers were sent to the Commander in-Chief, and forwarded to the Board, also a letter from Colonel Ross, and Major Stevens, stating—

"That, owing to insufficiency of establishment, it is not possible to conduct their business, particularly in time of war, therefore they state that sixteen assistant

engineers are necessary for the requirements of the service."

On 11th April this year, Lord Pigot, the Governor, restored Tanjore to the Rajah, in accordance with the orders of the Court of Directors, in spite of the intrigues of the Nabob and others to prevent it.

The Mr. Paul Benfield, who was so notorious in connection with the affairs of Tanjore, was the same man who was on the engineer establishment when Colonel Call was Chief Engineer. After the appointment of Lieutenant-Colonel Ross and the military establishment, he undertook a large quantity of work on contract. Mr. Burke, in February 1775, in his celebrated speech, consigned Benfield and others to everlasting infamy, but in spite of this, the result was that sixty lacs of rupees were secured to Benfield.

Marshman, in his *History of India*, states that Benfield "occupied an inferior post not worth more than 200 or 300 rupees a month." The case is not so. Benfield was apparently allowed to contract on a large scale, and he undertook the works of Fort St. George in 1775, 1776, and 1777. The Chief Engineer gives the amount of work done by Mr. Benfield under his contracts in those years as 603,857 pagodas; equal to twenty-one lacs of rupees.

In January this year, the Chief Engineer remonstrated against the appointment of a junior officer to command the garrison of Fort St. George. The Board informed him that "he would have been appointed to command, but his services would have been wanted shortly elsewhere, and Major Burghall" (apparently of Bengal Engineers, doing duty at Madras), "next in rank, was wanted at Trichinopoly, to which place he had been ordered to proceed."

This year, the fortifications of Vellum were destroyed by mining. The mines were sprung, and the work concluded, on 28th April.

In July the Chief Engineer complained to the Board of the hardship of serving under Colonel Braithwaite. The Board replied that "the engineers are not under the immediate command of officers of the garrison."

On 22nd August, Lieutenant-Colonel Cosby was appointed to command three battalions at Sholingar, eight coss north of Arcot. Captain Maule accompanied him as engineer, and Lieutenant Pringle, as captain of Guides.

Ensign Digby Brooke was also ordered on this service, but his appointment was cancelled at the request of the Chief Engineer.

This force was intended, in conjunction with the troops of the Calastry and Vencatagherry Rajahs, to take the field against Bom Ranze, a Rajah of the first consideration.

"This extensive tract of country had never yet been pene-trated with the least success by an enemy, and from its peculiar advantages (its capital being in the midst of hills and ravines) had deterred any serious hostile attacks even from Hyder, or the Mahrattas; nor were batteries mounted with cannon wanting to complete its defence, or a large force well disposed to avail themselves of these advantages; yet such was the superiority of the English, and the art of tactics brought into use, that, by diverting their attention, and turning their flanks, while other forces were making more serious attacks on their principal barriers, they were driven from one to the other, till the English gained such a footing in the country as to thoroughly alarm the chiefs. The Rajah was induced to capitulate, and allowed Cosby to take possession of his capital, till everything was finally adjusted, and military roads cut through the country. The whole affair only took six weeks, and our loss was small. Colonel Cosby received the thanks of Government for the celerity with which the work was done—which far exceeded their expectations."

In 1778, the works of Fort St. George were still carried on, about 1,500 people being employed; and it was resolved to

expend a monthly sum of half a lac of rupees on the works.

Lieutenant-Colonel Ross, on 6th March, wrote that "when the works now in hand are complete, Fort St. George will be an entirely new place—except the finished part of the north front, chiefly executed under Colonel John Call."

Lieutenant-Colonel Ross now went on leave to England, and Major Stevens took up his duties.*

In June 1778, news was received of war with France.

On 30th July, Colonel Braithwaite was ordered to march from Wandiwash towards Pondicherry, and halt one day's march distant for orders.

On 3rd August, Major-General Hector Munro was to take command of the army, march to Pondicherry, and summon the place.†

On the 8th, Munro was at the Red Hills, near Pondicherry (four miles).

By the 20th, the force on the Red Hills was reinforced; and on the 21st, possession was taken of the Bound Hedge. Redoubts were raised, and every preparation made to open the trenches as soon as possible.

On 31st August, a close reconnaissance was made, and it was resolved to carry on two attacks; one to the north, against the North-west bastion; the other to the south, against the Dauphin bastion, and a battery was commenced on the south-west to enfilade the works with four 24-pounders, and some mortars.

Notwithstanding that the enemy fired continually on this work, the battery was completed on 4th September.

* Simon Stuart and Charles Salmon appointed Practitioner-Engineers; Salmon to rank below Ensign Bellasis.

† Major George Burghall, Director of Engineers, set off with the army. On 17th August Major Stevens (arrived with three captains of engineers and other officers of the corps) took charge of the operations, and Major Burghall was allowed to go, and resign the service.

On the 6th, ground was broken to the north, and in the night a parallel was made within 600 yards of the town.

On the 7th, an enfilading battery was erected to the north west, containing four 12-pounders.

On the 8th, an approach was made from Ariancopang river, and carried within 400 yards, where a parallel was formed.

On the 11th, a battery of ten 24-pounders was begun to the southward; and on the 14th, another, for ten 18-pounders, was commenced to the north, several mortars were also placed in both attacks; and on the morning of the 18th all the batteries* opened.

The fire from the fort was very heavy, but towards evening our batteries had apparently the advantage.

On the 24th, a magazine in one of our batteries blew up. Meantime our other batteries kept up a heavy fire, and a breach was beginning to be made in the angle of one of the bastions. The approaches both on north and south attacks were carried forward as quickly as possible, new batteries were erected as the approaches advanced, and by 6th October the state of our attack was as follows:—

"On south attack, our lodgments were extended between the two ditches, and a passage to the counterscarp of the inner ditch was about to be commenced."

"On north attack, we had formed a lodgment on the crest of the glacis, embracing the angle opposite the bastion attacked, and batteries had been erected to take off the defences of those works that flank the said bastion."

Heavy rain and want of tools retarded the operations very much, for General Munro writes:—"Though the rains retarded our operations, yet the reduction of Pondicherry would have taken place much sooner had we been provided with cannon, stores, &c., sooner than we were; for though the army began to

* Twenty-eight guns and twenty-five mortars.

assemble near the fortress on 8th August, it was not till 6th September that the engineer would give directions for breaking ground, for want of proper tools to carry on the approaches."

"Powder shamefully bad, part of it condemned four years ago."

"On 7th and 8th October, the works, both on north and east attacks, were advanced."

"9th.—A new approach was carried on to the north, towards the salient angle of the ravelin, near the bastion attacked. In the south attack, the gallery was much retarded by the violent rains, which did damage to the trenches."

"On the 11th, the sap battery to the north was so damaged by rain, and by the enemy's fire from St. Joseph's bastion, that we were obliged to mask it. The gallery to the south was advanced very near the ditch."

"12th and 13th.—The batteries in the north attack were repaired, and the gallery to the south advanced to the ditch; but the violent rain so swelled the water in the ditch, that it ran into the gallery with such force that it seemed likely to destroy it."

"14th.—The bridge of boats that was intended to be used for the passage of the ditch on the south attack being completed, and a float being prepared for the same purpose to the north, it was intended to assault the place about 8 A.M., 15th; but about 11 A.M. on the 14th the water forced itself into the gallery with such violence, that it broke it down, and damaged some of the boats. The face of the bastion attached to the south, was entirely destroyed, and the faces of the adjacent bastions almost as bad. The face of the North-west bastion was also in ruins."

"Major Stevens, the Chief Engineer, went immediately to give directions to repair the gallery, and on his return to the south-west enfilading battery, he was unfortunately wounded by a cannon-ball, and died the same evening. General Munro

wrote:—"In him society has lost an honest man, and the Company a most valuable and gallant soldier."

"Though the assault could not take place, an attack was made on ravelin to the north about 2 A.M. The ravelin was surprised, and the enemy's party of twenty-two Europeans mostly killed, wounded, or taken prisoners, and we spiked four cannons and four mortars, and destroyed a good many arms, and a quantity of ammunition."

"By the 16th, the gallery was repaired, and it was resolved to assault the place next morning, and the necessary orders were to have been given to the troops in the evening; but about 11 A.M. Monsieur de Velette, Aide-de-Camp to General Bellecombe, came with a flag of truce from the Fort, with a letter for General Munro, to treat regarding capitulation. General Bellecombe agreed to deliver up Pondicherry at noon on the 19th.

"The French made a most gallant defence; indeed, the greatest gallantry has been displayed on both sides."

"The garrison became prisoners of war, but the colours of the Battalion de l'Inde were restored to it, in compliment to the gallant conduct of that Corps. The colours of the Fort were sent home with the despatches to the King."

General Munro in his final despatch says:—

"In justice to the troops, I inform you that officers and men paid the greatest attention to their duty, and on every occasion showed a spirit and resolution that will always do them the greatest honour."

Return of killed and wounded since the commencement of the siege:—

	Killed.	Wounded.
Artillery and Engineers ...	19	78
European Infantry	48	120
Sepoys	155	491
	222 +	684 = 906

Also 10 of the Nabob's troops.

Eight officers were killed and 26 wounded.

Of the Engineers:—

Major Stevens, Chief Engineer, killed.
Captain James Johnstone, wounded.

Of the Artillery:—

Captain Augustus de Morgan, killed.
Lieutenant-Fireworker John Baillie, wounded.
" " Hugh Mallet, "
" " George Saxon, "

Of European Infantry:—

1 Captain killed.
1 " wounded.
5 Lieutenants wounded.
2 Ensigns wounded.

Of Sepoy Officers:—

2 Lieutenants killed
3 Ensigns killed.
3 Captains wounded.
5 Lieutenants wounded.
6 Ensigns wounded.

The garrison of Pondicherry lost 680 killed and wounded.

	Killed.		Wounded.
European Officers	7		19
" Infantry	45		148
" Artillery	29		69
Citizens	3		7
Sepoys	52		94
Native Workmen	64		148
	200	+	480=680

The Engineer officers present were—

Major Stevens; Captains Maule, Theobald, Johnstone; Ensigns Gent, Digby Brooke, Thomas Bellasis, and Salmon.

Captain Geils also served as engineer, and distinguished himself.

On 7th December, Captain George Maule forwarded to General Munro a return of engineers as "Commandant, which had devolved on him by recent loss of a member of the corps whose zeal for the Company's interest and ability in conducting his duties will find, I am convinced, testimony in your remembrances."

Major Stevens' executor wrote to ask some assistance for Major Stevens' family, who were in narrow circumstances, and received the following reply:—"The Committee have a thorough sense of the great merit possessed by the late Major Stevens, and will most cheerfully recommend the situation of his family to the Company, in hopes that they will confer on them some mark of their favour."

Captain Maule recommended "Mr. Wickens for the Engineers, as also Ensigns Brunton, Marishall, and Gordon, who served as engineers at the siege; likewise Mr. Galway, who draws well and otherwise qualified."

On 10th December 1778, Ensign Alexander Beatson was appointed Acting Engineer at Masulipatam; and Ensigns Marishall, Brunton, Galway, and Wickens, Assistant Engineers.

Pondicherry having been taken, it was resolved to send an expedition against Mahé, a settlement of the French a few miles south of Tellicherry on western coast.

The force was under the command of Colonel Braithwaite, and consisted of two European battalions, three Native regiments, three companies of Artillery, besides engineers and pioneers.

On 28th February 1779, the last division of the army reached Anjenga in Travancore, having marched, it is presumed, from Trichinopoly to Madura, and thence through the Arriangow pass into Travancore. The embarkation was completed on 2nd March.

Our fleet consisted of the

Sea Horse, Commodore Parton.
Coventry.
Revenge.
Resolution.
Royal Charlotte.

With a prize sloop of the navy as a hospital ship, and transports.

On the march to Anjenjo we lost five Europeans by death, and about fifty sepoys by death and desertion,

Colonel Braithwaite arrived at Mahé on 14th March and found that Major Kelly, who was Acting Chief Engineer (he belonged to Artillery), had occupied two hills in our bounds and was advancing into the French bounds.

"15th.—A site was selected for a battery to reduce the Fort of Comachy, a new work formed by the scarping of a high chalk-hill, and only accessible, either as to the lower or upper fort, by rope ladders which were very long, and which the enemy drew up after them

"M. Picot, the Governor, was summoned, who answered that he would defend the place; so the battery was pushed on with alacrity. It was within 500 yards of the enemy's guns. The French fired a few guns from Fort St. George, and Chimbun, but without effect. Our battery would have opened on the 20th with four 18-pounders, but on the 19th M. Picot sent out proposals to surrender, which very much astonished Colonel Braithwaite." "He informed M. Picot that Fort Comachy should be immediately surrendered, and our colours hoisted as a signal; this was done, and at 2 P.M. on the 19th, Captain McLeod with sepoy grenadiers took possession of it, and next day Fort St. George, and Chimbun were occupied, and the same evening Forts Mahé, Dauphine, &c.,

"The cause of this sudden surrender was want of men,

money, communications, and provisions; otherwise the place was deemed almost impregnable, consisting of a number of forts on almost inaccessible heights, strongly fortified in themselves, and protecting each other."

"We thus obtained Mahé without firing a single shot, not even a musket, and the French themselves only fired about forty shots." "Our battery of four 18-pounders was nearly finished for attack of Fort Comachy; but if Mahé with its forts had been defended, it would have been a difficult task to capture it. The discontent of the surrounding Nairs with Hyder's government was the cause of its surrender."

The engineers employed on this expedition were—

Major Kelly (Artillery), Acting Chief Engineer.
Ensign Digby Brooke, Engineer.
,, Bellasis, ,,
,, Dundas
,, Machlin
,, McFarrund
,, Marishall
,, Hay
,, Gordon
} Assistant Engineers.

Pioneer Officers:—

Lieutenant Abbott.
,, Johnson.
Ensign Francis Baillie.
,, Bannerman.
,, Mullock.

It was determined to destroy all the forts; and for this purpose Ensign Digby Brooke, two pioneer officers, and one hundred pioneers, were retained to do the work. Major Kelly with the other engineers and pioneers were sent back. Everything had been done that art could do to add to the natural strength of the environs of Mahé, and had reinforcements arrived, Mahé would have required a very large force to reduce

it; but the French could place no faith in their allies. Mahé was extremely well-found in artillery and stores, for there were more than 100 pieces of cannon all in excellent condition.

Hyder was furious at its capture, as through the place Hyder was enabled to get a large quantity of European stores, and reinforcements of Frenchmen. To this is partially attributed his onslaught on the Carnatic in 1780. Colonel Braithwaite speaks highly of Major Kelly, and expresses his "approbation of Major Kelly's merits. I found he had been very active before my arrival, and his exertions have since been unremitted." The mines for the destruction of the forts were carried on under Lieutenant Brooke, and the first explosion took place on His Majesty's birthday, when the whole sea-face of Mahé was blown up; and by September the several forts and works of this colony, which had lately been put in order by the French, were in ruins. Towards the close of the work, Lieutenant Digby Brooke of the Engineers was killed by the explosion of one of the mines. At this time, Captain Geils was engaged in destroying the works at Pondicherry, and by the end of October the work of destruction was complete.

Sir Hector Munro, early in 1779, recommended Captain Geils very strongly for his conduct at the siege of Pondicherry, and asks that he should be appointed Field Engineer with the rank of Major.

The Board accordingly appointed him Field Engineer on the coast with the allowances of Major, but did not see their way to give him the rank. Colonel Baillie (so unfortunate in 1780) was commanding at Pondicherry during the progress of demolition.

In March 1779, the works planned for the defence of the sea-face of Fort St. George, Madras, were constructed in accordance with Major Maule's proposals of the previous December, with a line of cisterns along the east curtain.

In consequence of an order passed by the Board regarding

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allowances drawn by the engineers, Major Maule (Acting Chief Engineer) addressed a remonstrance to the Board :—

"The Corps of Engineers being on an inferior footing as to emoluments, with all others in the army, not enjoying alike with them off reckonings, &c., the indulgence of full batta to all engineers doing duty out of Madras, Masulipatam, Cuddalore, and other chiefships, has been for several years past granted to them in consideration of such deficiency. The cause for this indulgence still remaining, I hope you will be pleased to see the matter in the same point of view, and continue the only allowance that can bring the Corps of Engineers nearly upon a footing with the other officers of your army."

Full batta appears first to have been granted to the engineers in 1771, at the first siege of Tanjore.

CHAPTER VI.

Banks and Bonneveaux taken prisoners by the Mahrattas.—Movements of the English fleet under Rodney in 1780.—Combined French and Spanish fleets.—Rodney reinforced, but combined fleets had left for Europe.—Simon Stewart and Mr. W. Rylands, of Engineers, made prisoners.—Colonel Baillie.—Corps of Engineers in 1780.—Hyder Ali descends into the Carnatic.—Baillie's defeat.—Munro retreats to Marmelong.

It was in 1778, that we declared war against France to show our resentment for their having acknowledged the independence of the colonies under the title of United States, but it was not till the spring of 1779, that Spain united her forces with France against us.

The Spaniards declared war on 18th June 1779. Captain Bonneveaux, Infantry, and Lieutenant Banks, Engineers, were entrusted with a packet of papers, the chief purport of which was to inform the authorities at Bombay, Madras, and Calcutta of the Spanish declaration of war. They were ordered to travel across the Arabian Desert, and so to India. On the 10th July, they left London for Harwich. Across the Continent they travelled in Bonneveaux's " own town chariot turned into a post-chaise " as far as Venice, where they embarked. They narrowly escaped a cruiser in the Mediterranean, and arrived at Aleppo on 24th August. Twelve days' march from Aleppo, they were

attacked in the desert by a party of robbers, three times their number. They had the good fortune to beat off their assailants; but lost twenty-two camels, and fourteen of their men were wounded, including Bonneveaux himself (in two places, with a fracture of the skull). Bussora was reached on 4th October, Bonneveaux arriving in a very bad state of health owing to his wounds. After a stay of a week, at this place, they engaged a "donges boat" to take them from the Persian Gulf to Muscat. At the latter town, they changed into another boat, the owner of which engaged to take them to Bombay for 1,100 rupees. Unfortunately on 2nd December 1779, when about two days' sail from Bombay, they were captured by a Mahratta fleet. This fleet consisted of two "grabs," each mounting twenty 12 and 18 pounders, and three armed boats with 300 or 400 men on board them. Resistance was out of the question, as their boat was merely armed with four 3-pounders without the implements necessary to work them.

The Mahratta chief promised to send them in one of his boats to Bombay without baggage for 2,000 rupees, to be paid on arrival; but after he had got them in his possession, he thought no more of his promise. Thus it happened, that the papers entrusted to them were not thrown overboard at the time, and after capture they were too closely watched to do it. They were taken off Bancoote (Fort Victoria), some seventy or eighty miles south of Bombay, and carried into Viziadroog three days after, where they were stripped of everything and very badly treated. This, it appears, was greatly due to the villainy of an English deserter named Charles Constantine, living there, who, pretending to offer assistance, was, by his intrigues with Abba Saib, the Mahratta chief, the cause of their detention. He broke open all the letters, and by false translation insinuated that their business was of the greatest importance, and detrimental to the interests of the Mahrattas. Finding also, that Bonneveaux had bonds upon the Nabob (Carnatic) to a large

amount, he secured them with their seals, and got them sent out of the way to a fort called Russaulghur, in hopes of carrying some plan into execution to his interest by "countersigning our signatures." Russaulghur is a fortress in the Concan close to the Western Ghauts, latitude 17° 45′ N., longitude 73° 40′ E., thirty-four miles south-east of Fort Victoria. They were detained at Russaulghur for about three months, when they were sent to Poona. During their detention at the fort, they were treated very badly, and had often reason to believe that the Mahrattas intended to destroy them. It was only after reaching Poona, and "owing to another deserter named Thomas Barnes (a man very different to Constantine, and worthy every mark of our attention from his assiduity in serving us), that we have been acquainted with this wretched villainy" (i.e. Constantine's).

They reached Poona on 11th April 1780. Here two men rendered them a great deal of assistance in their troubles. A Captain Beadle in the service of Nizam Ali, at Poona, on business, and Monsieur Warnett from France. The former did everything he could, and advanced them money to the amount of 100 rupees, while the latter supplied them with necessaries to make their situation a little comfortable, and did his utmost with the Government for "our betterment," but without effect, and he was finally forbidden to see them. When it was represented that Bonneveaux required his medical assistance, their answer was, "If we died it was our fate."

On the 20th July 1780, the Governor at Madras wrote a letter to the Mahratta Regent, Nana Farnavis, asking him to release the prisoners, who consisted now of six besides Banks and Bonneveaux. This letter was sent by some means to Banks, and it was delivered to the Regent as though it had been sent direct without his knowledge. This occurred towards the end of October 1780. It did not produce any immediate effect, but they formed "great hopes upon it from this small circumstance

our provisions, which used to be served out all in a lump the 1st of each month, have not yet been delivered (12th November), and yesterday our guardian, on delivering me the third rupee we have had this month in lieu of it, told me that Nana Farnavis was about doing something regarding us. I hoped it was our release." Nothing was, however, done till 12th June 1781, when, with the exception of Bonneveaux, all were released. Unfortunately for Banks, the order was countermanded on the 14th. He was re-captured twenty-five miles from Poona, and on the 15th Bonneveaux "had the mortification to see him once more partaker of my misery." All the rest got away to Goa. Finding Nana Farnavis was so obstinate as to giving him his liberty, Bonneveaux thought seriously of making his escape, and to enable him the easier to effect this, he went to a separate house, and led a retired life. On 25th August "trusting to Providence, a pair of pistols and two servants, one an Italian and the other a Rajpoot, I left Poona on horseback in an Arabian dress. I steered various points in the compass till I arrived at Beer in the Nizam's country, from which place I sent back my European with a horse to bring Captain Banks." Beer, or rather Bheer, is the principal town of a small hilly district in the Nizam's dominions, seventy miles east from Ahmednuggur.

On 19th October 1781 we find Bonneveaux at Fort St. George. He wrote a long account of his trials to Lord Macartney, the Governor, and asked for "2,000 pagodas to pay the sums I borrowed at Poona, and on my road, and to afford me clothes and other indispensable necessaries." The Council in reply granted him the 2,000 pagodas, and "are satisfied that he had done everything in his power to save the Honourable Company's packet entrusted to his care, and that his destroying them was an act of necessity." On 16th February 1780, he had been put under charge of Mr. Norwing, a Portuguese gentleman, who had the civility to remove the guard; Bonneveaux took advantage of this to redeem the private letters, which were recovered all broken open. The public

packet was [illegible] but about the same time, and burnt. [illegible] to have got away till the early part of [illegible] May 1782 that he addressed Lord Macartney [illegible] sufferings and the expenses he had incurred. In [illegible] states, "You are well acquainted with the natives of India, and able to form an opinion how the unfortunate European is treated. I therefore need only say that I have experienced every ill from a cruel and revengeful people, in stripping me of all my things, giving me food unfit to eat, and from the rigidness of my prison during the greatest part of my captivity my constitution gave way to a malady (the bloody flux), the effect of which, for want of wholesome necessaries, I feel even at this time." He asked for 2,000 pagodas and his pay up to 1st June 1782, and mentioned that he had drawn upon the Government for 4,000 rupees advanced to him by General Goddard.

The Government granted him the 2,000 pagodas, as also his bill for pay and batta, amounting to pagodas 3,400.34.50, deducting 4,000 rupees advanced him by General Goddard. He was promoted to Captain from 14th ~~December~~ 1778, the date on which Stevens was killed at siege of Pondicherry.

In the early part of 1780, Rodney crossed the Atlantic, and reached Barbadoes in middle of March; learnt that the Comte de Guichen was off St. Lucie, blocking up a British squadron in Gros Islet bay, and at once set off from St. Lucie with an inferior force. De Guichen, however, made off, and sought refuge at Martinique, anchoring in Port Royal bay. However, in April, Rodney had a battle with De Guichen. It was indecisive, owing to misconduct of some of Rodney's captains.

Reinforcements now came from Spain for the enemy's fleet, got safe into Guadaloupe, and there De Guichen joined them.

The combined fleets had now thirty-six sail-of-the-line, and proceeded to Martinique. Rodney had only seventeen sail, and

PLAN OF THE

FORT OF PONDICHERY,

MAJOR-GENERAL HECTOR MUNRO

REFERENCES.

1. Two Guns Battery.
2. Four Guns Battery.
3. Mortar Battery.
6. Redoubt.

11. Mortar Battery.
12. Eight Guns Battery.
13. Four Guns Battery.
15. Redoubt.

PLAN OF THE

FORT OF PONDICHERY,

AND ITS ENVIRONS, WITH THE ATTACKS MADE BY THE BRITISH TROOPS UNDER THE COMMAND OF

MAJOR-GENERAL HECTOR MUNRO,

IN SEPTEMBER AND OCTOBER 1778.

REFERENCES.

A. St. Laurent Bastion.
B. Little Battery.
C. Goudalour Bastion.
D. Hospital Bastion.
E. La Reine Bastion.
F. Villenour Bastion.
G. Sanspeur Bastion.
H. Valdaour Bastion.
I. St. Joseph Bastion.
K. North-west Bastion.
L. Madras Bastion.
M. Orleans Bastion.
N. Anjou Bastion.
O. Stockades.
P. Sea Gate.
Q. Madras Gate.
R. Valdaour Gate.
S. Villenour Gate.
T. Goudalour Gate.
U. Government House.
V. Barracks.
W. Prison.
X. Magazine.
Y. Arsenal and Artillery Barracks.
Z. Mint.
&. Engineers' House.
AA. Hospital.
BB. Powder Magazine.
CC. Debt Godown.
DD. Bazar.

Northern Attack.

1. Ten Guns Battery.
2. Four Guns Battery.
3. Mortar Battery.
4. Sap Battery of Eight Guns.
5. Two Guns Battery for firing upon the *Brillant*, French ship in the Roads.
6. Redoubt.
7. Enfilading Battery, four 12-prs.
8. Cohorn Battery of Four Guns.
9. Battery of one Gun in the middle of the Avenue.

Southern Attack.

10. Flèche Battery.
11. Mortar Battery.
12. Eight Guns Battery.
13. Four Guns Battery.
14. Battery of Four Obus.
15. Redoubt.
16. Enfilading Battery of Six Guns.
17. Bridge.

Scale of Yards

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fully expected them to attack him. He took up a strong position in Gros Islet bay, and waited for them, occupying himself in assisting the Governor of St. Lucie in putting the isle in a state of defence. He expected reinforcements from Europe, and intended to attack when they arrived. The enemy unaccountably remained idle at Martinique for a month.

When Rodney's reinforcements arrived, he found that the enemy had gone. De Guichen had left for Europe. In August he reached Cadiz, where he united his fleet to another, under D'Estaing, which was lying there. It was at this time that Ensign ~~Lieutenant~~ Simon Stewart and ~~Ensign~~ Cadet William Wynne Ryland, of Madras Engineers, were on their way out to India, on board the *Mount Stuart* Indiaman, which, with other vessels, was captured by the combined Spanish and French fleets on 9th August 1780, somewhere near the coast of Spain. Stewart was detained some months a prisoner in Spain, sustaining the loss of his baggage. Stewart pursued his voyage "on parole," from Lisbon, in a Portuguese ship bound to Bombay, "which was the most direct and eligible mode I could adopt, in order to avoid the risk of being again captured." Stewart was allowed by the Government a gratuity of 300 pagodas (about 1,000 rupees).

Ryland returned to England, and procured his exchange. He did not arrive in Madras till August or September 1782, when he was appointed ensign from 14th October 1780.

On 3rd November 1779, Colonel Baillie was appointed to command the force for Adoni, and on the 20th he took command at Epperia.

On the 28th it was at Arincopalah.

Captain Theobald, of Engineers, was appointed engineer to Colonel Baillie's detachment; and Ensigns Bruce and Wickum, assistant engineers.

On 5th December, Baillie was at Innaconda, and on the 24th we still find him at that place.

At this time the Corps of Engineers consisted of the following:—

Lieutenant-Colonel Patrick Ross.
Major George Maule ... ... 14th December 1778.
Captain John Theobald ... 14th July 1778.
„ James Johnstone ... 15th August 1778.
„ George Banks ... 14th December 1778.
Lieutenant William Gent ... 14th December 1778.
Ensign Simon Stewart .. 4th January 1778.
„ Thomas Bellasis ... 8th February 1778.
„ Charles Salmon ... 4th May 1778.
„ John Wickens ... 19th August 1778.
„ Francis Antony Mantelli 18th January 1780.
„ Richard Baker... ... 21st February 1780.
„ Bruce.*
„ Brunton was appointed in 1778.

It was in July 1780, that Hyder Ali descended into the Carnatic, through the Changama Pass.

The forts at Trinomally, Chittapet, Arnee, Gingee, Chillumbrum, Cauverypank, and Carangooly, were all given up to him; and, in less than a fortnight, he possessed a chain of our frontier garrisons that completely secured his convoys from the Mysore country.

His cavalry penetrated to the environs of Madras, while he himself commenced the siege of Arcot.

The English formed a camp at Poonamallee, under Lord McLeod.

The Council wished our army to assemble at Conjeveram, but Lord McLeod represented how inadvisable this was; and as the Council insisted upon Conjeveram as the place of rendezvous, Lord McLeod resigned the command, and Sir Hector Munro,

* In April 1780 Ensign Bruce was appointed to take sections of ground about Pondicherry.

acquiescing in marching to Conjeveram, took the command. Colonel Baillie, who was with a small force at Gomerabunder, in Guntoor, was ordered to join Munro at Conjeveram, and Colonel Braithwaite's detachment in the south was also directed to hasten thither.

Colonel Baillie had upwards of 200 miles to march, while Braithwaite was distant about seventy; the latter joined in the course of ten days.

On the 26th August, Munro began his march, and reached Conjeveram in three days.

On 24th August, Colonel Baillie reported his arrival at Arnee.*

On the 27th, it began to rain most violently, and continued to do so till 6th September, so that the roads were in very bad order, and the country covered with water.

On the 31st, Munro learnt that Hyder had left Arcot, and was crossing the Palar.

Baillie was stopped about five miles to north of Tripassoor by a small river that was so deep (owing to the heavy rains which still continued) that he could not pass it.

3rd September.—"The rains still continuing most violently, Munro learnt † that Hyder had quitted Arcot on the 29th, and that he was now encamped at Bala Chetty's Choultry, five miles in our front. Baillie crossed the river on the 3rd.

On the 6th, the enemy moved their camp to the north-east; Munro also moved two miles on road to Tripassore. Tippoo, with part of Hyder's army, attacked Baillie at Perambankum, but he succeeded in repulsing him, although not without considerable loss. After the action, Baillie sent a message to Munro, that, owing to his losses, he was unable to advance, and hoped to see Munro at Perambankum. Munro, however,

* Arnee is about twenty miles north-west of Madras on road to Nellore, and about sixteen miles from the coast between Pulicat and Ennore.

† By letter from Captain Prendergast.

feared to leave Conjeveram uncovered, as he had all his stores there; so, with the concurrence of the principal officers, he resolved to send a strong detachment under Lieutenant-Colonel Fletcher to reinforce Baillie, who was now fourteen miles distant.

At 9 P.M. on the 8th, Colonel Fletcher left, and joined Baillie at Perambankum at 6 A.M. on the 9th. Colonel Baillie now advanced from Perambankum on evening of the 9th, keeping his baggage on the right flank, and his left towards the enemy. He was much harassed in his march by Tippoo's division, and was so much retarded, that during the night he only advanced four miles, and then unfortunately took post. Hyder meantime decamped about midnight, leaving his camp-fires blazing, and a few thousand horse to hover round Munro's camp to conceal his enterprise. Early in the morning, he laid his whole force in ambush, behind the woods and village of Polilore.

At sun-rise Munro, found that Hyder had gone, and he at once marched towards Polilore. At day-break, Baillie continued his march; at first, no material damage was sustained, but when the advanced guard turned off on the left, to the road leading to Conjeveram, through Polilore, Tippoo opened some guns upon them from embrasures cut in the bank of some water-courses. A halt was made, and these guns were seized, but a larger force appearing, they were compelled to abandon them.

Baillie then disposed his army in an oblong square, with field-pieces at proper intervals, and the baggage, &c. in the centre. Unfortunately the ground was commanded almost on all sides. Soon after this, they were beset by the whole of Hyder's army, as well as Tippoo's division, which completely surrounded them.

The small force gallantly supported a very unequal fire, until two tumbrils of ammunition blew up, which, of course, silenced the British artillery. Hyder's guns drew nearer and nearer at every discharge. Colonel Baillie's detachment, seeing their

artillery silenced, naturally became dismayed. The enemy made a movement for a general charge, and advanced on all quarters to close attack. All the camp-followers rushed in confusion through the ranks, and threw the whole into disorder. The sepoys relinquished every hope of success, and, notwithstanding the extraordinary exertions of their European officers, were not to be rallied. The Europeans quickly united again in compact order, headed by their gallant commander, and, being joined by all the sepoy officers, placed themselves on a rising bank of sand in their vicinity, and resolved to defend themselves to the last.

"History cannot produce an instance for fortitude, cool intrepidity, and desperate resolution to equal the exploits of this heroic band. In number now reduced to 500, they were opposed by 100,000 barbarians, who seldom or never grant quarter. Distinct bodies of horse came on successively to the charge, with strong parties of infantry placed in the intervals. Several of these attacks were repulsed. Fresh columns incessantly poured in upon them with redoubled fury, and at last so many were brought to the ground, and their fire was consequently so weakened, that they were unable to withstand any longer the tremendous shock, and the field soon presented a picture of the most inhuman cruelties, and unexampled carnage. Lieutenant-Colonel Fletcher, and twenty-nine European officers, with 155 European soldiers, were killed, and Lieutenant-Colonel Baillie, with thirty-four officers, and almost all the European privates, were wounded. Only sixteen men and officers remained unhurt—these, with the wounded, were made prisoners."

The whole of the sepoys were either killed, taken, or dispersed. Captain Theobald was the Commanding Engineer with the force, and, as I cannot trace his name among Hyder's prisoners, he must have been killed on the field of battle. Ensign Brunton, of Engineers, was taken prisoner and carried to Seringapatam, where he died.

Munro returned to Conjeveram, and resolved to fall back on Chingleput.

He threw the heavy guns and stores, which could not be moved, into the large tank, and at 3 A.M. on the 11th left Conjeveram.

He marched all day, and at 11 P.M. reached a river, one and a half miles from Chingleput, so deep, that the rear of the army had not crossed till 9 A.M. on the 12th. He found no provisions at Chingleput, so at 6 P.M. he marched towards the Mount, and arrived on the 14th at 12 P.M.

On the 15th, the army marched to Marmelong, where they encamped. The primary cause of the disaster at Perambankum was the unexpected and unprecedented fall of rain, which fell almost uninteruptedly from the 26th August to 6th September. This rain caused a small river to rise so high, that Baillie's detachment was prevented from passing from the 27th August to 3rd September.

The secondary cause of the defeat was the blowing up of the tumbrils. Had it not been for that, Baillie's force could have held out till the arrival of Munro, who was at the close of the affair only two or three miles distant, and would have attacked Hyder in the rear.

I have been unable to ascertain the names of the engineer officers with General Munro's force, but Captain Pringle was the Captain of the Guides, and Munro speaks very highly of his services.

In 1779, a Civil Architect was appointed from home. His name was Philip Slowey. The Chief Engineer was much opposed to this appointment.

Towards the close of this year, Ensign Martelli asks to be appointed to the Artillery. This change was allowed, and a Mr. George Bong, who had served as an engineer in the Swedish service for several years, was appointed Ensign and Practitioner-Engineer in his room.

Up to this time, companies of pioneers and miners were formed, when required, by volunteers from European and Native Infantry, and when no longer immediately required they were broken up.

In September 1780, orders were, however, issued for the formation of two companies of pioneers, each to consist of two sergeants, three corporals, five havildars, five naiques, and 100 privates.

Fifty of the privates were armed with pistols, and remainder with pikes six feet long.

CHAPTER VII.

Sir Eyre Coote's campaign.—Battle of Porto Novo.—Battle of Pollilore.—Coote's Despatch.—Battle of Sholinghur.—Hyder attacks our advance force at Veracundalore.—Vellore relieved.—Chittor captured.—Southern campaign.—Braithwaite attempts Pateoottah.—He is wounded.—Nixon takes command.—Siege of Negapatam.—Negapatam capitulates.—Sir E. Hughes goes to Trincomalee.—Capture of Trincomalee.—Vellore relieved.—Hyder lays a snare for us.—Defeat of Braithwaite.—Cuddalore capitulates.

On the 5th November, Sir Eyre Coote arrived from Bengal, and on the 13th the army marched into cantonments, formed into three divisions, and every preparation was made for the ensuing campaign.

By the 14th December all was ready, and on that day the army encamped at the Mount.

On 17th January 1781, the army took the field.

On the 19th, Coote encamped south of the Palar near Chingleput. Two days afterwards, the fort of Carangooly was taken by a detachment of Europeans, sepoys, and lascars, under Captain Davis, by Coote's orders.

On the 24th, Coote relieved Wandiwash, and recommended Lieutenant Flint and Ensign Moore for promotion on account of their eminent services in defence of Wandiwash. They defended it from 12th August 1780 to 24th January 1781.*

Flint rose to the rank of Lieutenant-Colonel in the Company's service, retired 27th June 1798, and died in London in 1820. For this gallant defence Flint obtained no recognition.

Hyder was engaged in the siege or investment of five different posts commanded by English officers, Amboor, Vellore, Wandiwash, Permacoil, and Chingleput. Amboor surrendered on 13th January, but the others held out.

Hyder raised the sieges of Permacoil and Vellore.

On 1st February, Coote having heard of the arrival of the French fleet, relieved Permacoil, and then marched to Pondicherry, to impede communication with the shore.*

On the 5th, the army encamped on the Red Hills, when Hyder's army appeared in great force. Hyder declined battle, and on the 8th the French fleet left the coast

Coote's army consisted of—

1,200 European Infantry.
400 European Artillery.
5,000 Sepoys.
800 Native Dragoons, and
62 pieces of ordnance.

It seemed as if Hyder wished to cut us off from Cuddalore, so Coote at once marched for that place.

On the 10th, Coote reconnoitred the enemy and offered battle, but it was refused. The army accordingly remained at Cuddalore in a state of inactivity from the middle of February till the end of June.†

Major-General Stuart joined the army by sea in May.

The army having become discouraged by this inactivity, Coote

* In June, Ensign Wickens, Engineers, was in the Fort of Carangooly.

† Captain Thomas Geils obtained his commission as Major of Engineers by brevet; it was granted to him by the Court of Directors in their letter of 2nd February 1781, and the commission was made out accordingly on 17th July.

determined to attempt some enterprise. At this time Hyder was in Tanjore, and had laid siege to Thiagur—a hill-fort fifty miles west of Cuddalore. Coote attempted to relieve it, but was obliged to return to Cuddalore.

The next attempt made was against Chillumbrum. The place was assaulted; but after severe fighting Coote was obliged to draw off his troops with the loss of a brass 12-pounder, eight officers and 250 men killed and wounded.

Coote, however, determined to make another attempt on Chillumbrum, and, to make sure this time, he marched to Porto Novo to procure battering cannon from Sir Edward Hughes' squadron, which had arrived there.

Coote had no sooner arrived at Porto Novo, when he found himself surrounded by the Mysore army under Hyder himself.

Hyder had made a forced march from Shamaram in Tanjore, advancing with his cavalry ninety miles in one day. Coote sent his heavy baggage and encumbrances on board the fleet, and at 4 A.M. on 1st July our line was put in motion.

Hyder's army consisted of 50,000 horse, 30,000 regular infantry, forty-seven field-pieces, in addition to the guns of their batteries, two troops of French hussars, and a battalion of Europeans, forming altogether an army of over 80,000 fighting men.

Coote's army, consisting of 8,000, advanced about a mile into a large plain, and was formed in two lines. Our troops were first menaced by Hyder's cavalry, who, as we advanced, retired, and at length disappeared behind the woods and sand-banks in their rear, unveiling six masked batteries of six to ten guns each. On this being discovered, a halt was made to reconnoitre the guns.

Our line was then ordered to file off to the right, when the enemy at once opened fire furiously.

Having cleared the range of these batteries, we kept along a sand-hill between us and the enemy's line, moved through a

narrow pass in the centre of the sand-hill, and formed on a plain the other side.

By this time, there was a severe contest going on between enemy's grenadiers and horse, under Monsieur Lally, and our second line, under General Stuart, for the possession of a hill on our left flank, which was at length gained at the point of the bayonet. Captain Moorhouse of the Artillery here greatly distinguished himself.

The first line, meanwhile, having formed up about 10 o'clock, a dreadful cannonade commenced from all quarters, and continued till 3 P.M. It was then that the army suffered its greatest losses.

At this crisis, Munro recommended Coote to make a brisk and immediate attack, and Coote soon after gave the order to advance. By this time, the steadiness of our troops, and the excellence of our artillery had visibly slackened the enemy's fire, and thrown their ranks into disorder. In order to facilitate the removal of their guns, they had posted a line of infantry far outflanking ours in a deep furrow fronting us, which stood till we came within 200 yards, but then became panic struck and gave way. Our guns poured in grape-shot amongst the fugitives, and as they had to ascend the sand-hills before they were screened from our fire, great numbers of them fell.

Continuing the pursuit, we reached the top of the sand-hills, where, being stopped by a deep nullah, a few more shots put an end to the carnage and fatigues of the day.

We lost seventeen European officers and fifty Europeans, besides twenty native officers and 500 sepoys killed and wounded.

Many of Hyder's principal officers were among the killed and wounded, amongst them Meer Saib, one of his bravest partisans.

About 4,000 Mysoreans fell at the battle of Porto Novo, but it was difficult to ascertain the exact numbers. Monsieur Lally

was wounded. Hyder and his army reached Chillumbrum before they thought of rallying

Tippoo was now besieging Wandiwash. On 18th July, Tippoo, after being repulsed in storming the place, had to raise the siege on the approach of Coote, and the British army arrived on the 20th. This was the third time Wandiwash had been relieved by Coote.

Coote now determined to effect a junction with Colonel Pearse, who was marching from Bengal with a strong reinforcement. On 2nd August, Coote effected a junction with Pearse, who had with him ten battalions of Bengal sepoys, and twenty pieces of cannon.

This union increased our force to 12,000 men. After returning to the Mount, the army was formed into five brigades of infantry, and one of cavalry. General Munro commanded the right wing, and Colonel Pearse the left. The cavalry were led by Colonel Cosby, and the infantry brigades by Lieutenant-Colonels Elphinstone, Owen, Edmonston, and Blair. The Bengal Artillery were on the right under Colonel Elliot, and the Madras Artillery on the left under Major Mackay. Captain Dugood commanded the engineers.

All the detachments in the Tanjore country were ordered to draw themselves together, and Colonel Braithwaite was sent to command them. The southern army amounted to 5,000 men.

The main army made every preparation for a march to the siege of Arcot and relief of Vellore, and began the march on the 16th August; on the 20th they took Tripassore.

Hyder was then encamped at Conjeveram. As the British army advaced, his irregulars obstructed its march, and on the 27th August, he appeared in full force behind the woods and village of Pollilore (the same place where Baillie had been defeated). Hyder superstitiously thought that this was a lucky spot for him, and determined to hazard a second general engagement.

The enemy's position was first announced by some guns opening on our advanced guard. Our line was irregularly formed on broken ground. A front had no sooner been presented, than fresh batteries were opened from other quarters. Colonel Pearse's brigade was formed in a position to oppose the fire on our left flank; while the remainder of the line under Munro changed front to the right, and then to the left. The second brigade, under Colonel Edmonston, was ordered to attack Polilore. Munro* was ordered to make a movement to the right, but shortly after, the order having been countermanded, he was directed to make an advance on the village.

The enemy were at length dislodged from every strong position on their left. Colonel Owen then got orders to move from our right to assist our left in throwing the enemy's right flank into confusion, and soon the enemy were put to flight, and the action finished at sunset. Hyder claimed the battle as drawn, and as Coote after the battle retreated to Tripassore for provisions, it certainly must have looked like one, but there is still the fact that Hyder was driven from his position at Polilore, and it was merely want of provisions which forced Coote to retire.†

Our losses in this battle were ‡:—

	Killed.	Wounded.
Europeans	28	25
Natives	105	207
	133	232

besides fifty-eight natives missing.

* The newly-formed pioneers were with Coote's army throughout his campaign in 1781. One of the companies was commanded by Lieutenant Innes.

† Major Stubbs says that Sir Hector Munro, on the right, sat sulkily under a solitary tree, declining to give any orders on account of an affront he had received from Coote. He had made a suggestion to Coote, and the General had told him he was giving advice when he ought to be doing his duty.

‡ Coote's Despatch.

Hyder was supposed to have lost 2,000 killed and wounded.

Major-General Stuart lost his leg by a cannon-shot, in the beginning of the action.

After the battle, Sir Hector Munro received permission to leave for Europe, the state of his health being bad.*

On 19th September, the army again marched towards Vellore, close to Pulicat and Sholinghur mountains, which protected our right flank.

Hyder's camp was pitched on a gentle declivity, with strong ground, and a tank in his front—his left flank being under the Sholinghur hills. The British army advanced, and encamped with its right flank covered by the same hills, and parallel with enemy's line; while between the two lines was a long range of low rocks.

Early on 27th September, Coote advanced to these rocks, and reconnoitred, and then ordered the army to advance in front.

This was done; and when they came in view of the enemy, they marched to the right, till they were covered on that flank by a large tank. A cannonade began on both sides. The 2nd Brigade, under Colonel Edmonston, with all the cavalry, moved round the tank without being seen, and fell suddenly on camp and left flank of the enemy. At the same time, the rest of the army advanced, which threw Hyder's right wing into confusion. Hyder ordered Tippoo to rally the cavalry, and charge the left of our line. He attempted to do so, but they were so warmly received by the Artillery, that the army was thrown into general disorder, and Hyder thought it time to draw off his guns. As a last effort, he sent a desperate body of 1,000 cavalry, who had vowed to break the English line.

They advanced on 18th Bengal, and 17th, 18th, and 21st Madras, on our left, but these troops reserved their fire till they

* Departure said to have been influenced by Coote's harsh reply to him during battle of Pollilore.

were within fifty yards, when a volley was delivered with great execution. The cavalry forced their way, however, through the intervals, but the sepoys went to the right-about, and gave them another volley in their rear.

By this time, all the enemy's guns, except one, had been drawn off, and his line completely routed.

The cavalry and 2nd Brigade, continued the pursuit till sunset, and the action came to an end. The enemy lost upwards of 2,000 killed and wounded.

Our loss, including officers and men, did not exceed 100 killed and wounded. As usual, owing to the want of provisions, Coote was not able to take advantage of his victory, and would again have had to retire, had he not become friendly with Bom Rauze, the Carvetnuggur chief.

Coote determined to wander through his territory in quest of a daily subsistence. The army, guided by Bom Rauze, began its march on 1st October through the Sholinghur Pass, the 2nd Brigade being posted there as a guard.

After a fatiguing march of two days amongst the hills, they reached Atamcherry (about fifteen miles north of Sholinghur).

Here the army subsisted well for several days.

On the 12th, however, Coote learnt that a large body of the enemy's cavalry and infantry had entered the territory, and were plundering; he instantly marched with the cavalry, and three battalions of infantry, and, after supporting a share of fatigue,* which, at his years, entitles him to admiration, completely surprised the whole of their party in their camp, and took all their provisions, saddles, swords, and forty horses. As soon as rice could be collected for the relief of Vellore, Colonel Owen was ordered to advance, and take post at the pass of Veramundalore, with 100 Europeans, five battalions of sepoys, a regiment of cavalry, with two 6-pounders and eight cavalry guns, besides a

* During this expedition Coote was on horseback for thirty-two hours.

detachment of pioneers, under Lieutenant Innes—(Versoundalore, twenty miles in front of us),—to distress Hyder by blocking up his supplies of provisions, which came from Chittoor to his camp on Timery Plains, thirty miles distant. Hyder soon began to feel great inconvenience from his situation, and having made a forced march, and reached Owen's camp on 23rd October, surprised him. Our troops formed line with difficulty, and were at once beset on all sides. The tents and baggage were designedly set on fire, owing to want of time, and the chief object became the possession of the pass between Owen and the main army. Detachments were sent from both armies for this purpose, but ours succeeded, and, though pressed upon both flanks, our troops stood until one attack took off one of our guns, and dispersed the battalion that had charge of it. Captain Moore no sooner heard of this, than he, with the European Grenadiers and 21st Sepoys made a dash to the rear, recovered the gun,* and left 150 of the enemy dead. By this, the sepoys were much encouraged, and had now got within the defile close to the main army, which had moved to Owen's support.

Hyder now thought it useless to pursue, and drew off his troops. Colonel Owen soon after joined the main army, which encamped at Madowaddy. We lost in this affair, seventeen European and Native officers, and 300 rank and file killed and wounded.

On 26th October, Coote moved to Polipet, while a detachment was sent to Tripassore with sick and wounded.

At Polipet a fortunate discovery was made of an immense quantity of rice hidden under ground, which at last enabled Coote to relieve the distress at Vellore—that place having been supplied on November 3rd with provisions for three months.

Colonel Lang, with part of the garrison, was withdrawn, and Captain Cuppage left in command.

* Captain Moorhouse, Madras Artillery, assisted at this.

The army now proceeded to the attack of Chittoor. The garrison made a gallant defence for some days, but capitulated on a breach being made in the rampart. A garrison was left in the place.

"Captain Dugood, of the Engineers, a valuable and experienced officer, was killed by a random shot at this siege, and Coote received a contusion in the neck from the splinter of a stone which the shot had raised as they were reconnoitring."

From a careful examination of the information av[illegible] am led to believe that the following Madras Engineers [illegible]t with Coote:—

Captain Dugood.
Captain Johnstone.
Captain Gent.
Lieutenant Wickens, in Septem[illegible]er sent to Negapatam.
Ensign Baker.
Ensign Ogg.
Ensign Bong, in December sent to mine fort at Pulicat, and make arran[illegible] for destroying it.

The monsoon [illegible] set in, the army broke up on 2nd December on the [illegible] plain, and marched to cantonments in the environs of Madr[illegible] and the campaign of 1781 was brought to a conclusion.

In the month of August, Colonel Braithwaite was commanding the Southern Army in Tanjore, and was encamped south of the Venaur. Hyder held many forts in the country, and seemed determined to retain them. Braithwaite attempted to storm Tricatapully, but was beaten off. He reported that Hyder had formed an alliance with the Dutch at Negapatam.

Braithwaite determined to reduce Pataocottah, the southern extremity of the kingdom, with the hope of obtaining provisions, and opening communications with Admiral Hughes by way of Adriapatam. He appeared before it on 28th August, made a practicable breach by the 80th, and assaulted it. His force was,

however, repulsed, and Braithwaite himself received a musket-ball in the fore part of his right shoulder. Colonel Braithwaite being thus *hors-de-combat*, sent a message to Colonel Eccles Nixon at Trichinopoly to come at once, and take command.

Colonel Nixon arrived on 4th September. In a few days he took Manarcoil, after a siege of two days. By the 17th September he had taken Mahadapatam. The garrison repulsed our utmost efforts in the breach, but quarrelled among themselv[illegible] hich made us easily masters of the fort.

[illegible] Geils was the chief engineer with this force, and on 24th [illegible]ptember Lieutenant Wickens was sent to join Colonel Nixon's army to assist at the reduction of Negapatam.*

It was the Governor, Lord Macartney, who decided upon the capture of the Dutch settlements, especially Negapatam and Trincomalee.

Sir Eyre Coote was opposed to the measure, but in spite of this Lord Macartney persisted, and asked Sir Hector Munro (who was at this time at Madras waiting for a passage to England) to take the command. [illegible]e at once agreed to do, and on the 21st October Sir Hector [illegible]o took command of the Southern Army, and sat down before th[illegible] place.

On the 27th, he made a disposition for the attack of the enemy's redoubts and lines to the westward. The attacking party was—commanded by Colonel Nixon—100 marines, 100 seamen from the fleet, and two battalions of sepoys.

To favour the attack, another party, consisting of twenty-eight seamen, the Madras detachments, and Captain Scott's sepoys, under Captain Scott, were ordered to force the redoubt on sand-hill to the eastward. The party marched, but the attack failed.

The next day another attempt was made, but again without success. On the 29th, Munro requested the Admiral to send

* A detachment of pioneers, under Lieutenant Abbott, was serving under Colonel Braithwaite, and was present at siege of Negapatam.

some intelligent person in a boat to look at the enemy's lines and redoubts to the east, having resolved to make the third attempt from that quarter.

The Admiral sent Lieutenant Hughes in a boat, but his report having differed from previous ones, Munro sent Major Geils, the chief engineer, to the Admiral on board the *Superbe*, who sent Lieutenant Hughes with him to examine the enemy's works. They reconnoitred the works, and having given in their report, Munro ordered attacks to be made at 2 A.M. on the 30th, and these happily succeeded, with small loss.

From the 22nd to the 30th materials had been got ready for our batteries; orders were now given to break ground before the north face of the fort.

On 1st and 2nd November, an approach was carried forward 120 yards, under cover of some trees, to the left of the parallel.

"3rd.—Finished from 500 to 600 yards communicating with it through a dry tank to the enemy's works.

"4th.—Employed in rendering the above still more complete.

"5th.—Began the 10-gun battery, but the enemy, making a sally early in the night, so far impeded the work, that only embrasures for six of the guns were finished. This was called Seamen's battery.

"6th.—Laid the platforms, and completed the battery in the night, consisting of four 18-pounders and four 12-pounders of ours, and two 12-pounders taken from the enemy. Advanced an approach to a mortar battery from centre of the parallel.

"7th.—Opened the batteries, which did considerable damage in the course of the day, five guns on right taking left face of the bastion to right of gateway, and enfilading those of its right face; the other five guns, being inclined, did the same to bastion on left of gateway.

"8th.—12-gun battery commenced to-day, called Marine battery.

"10th.—Opened from four guns of Marine battery, which did great execution against circular bastion on north-east angle and breached bastion to left of gateway. Enemy made a sortie about 4 P.M., but were repulsed with great loss.

"11th.—Opened both batteries. This would soon have made breach practicable, but a flag of truce was then sent out. A large battery of ten 18-pounders was completed within 800 yards of the rampart, and a formidable breaching battery also constructed in another convenient situation."

The garrison was then summoned to surrender; but the Governor resolved to stand the siege, and soon after his troops made two brisk sallies from the fort, which were both repulsed. Meanwhile, the batteries opened fire furiously, which soon demolishing the nearest bastion, the commandant was induced to ask for a parley, and a capitulation was agreed to, and signed on 11th November.

The Southern Army then returned to Tanjore, and the command again devolved on Colonel Braithwaite. A short time after, the fortifications of Negapatam, the citadel excepted, were entirely demolished.

During the siege about 250 Europeans and 800 Natives were killed and wounded.

During the operations at Negapatam, Sir Edward Hughes had stationed a 64-gun ship to blockade Trincomalee.

On 2nd January 1782, the Admiral left Negapatam with his squadron, having re-embarked his seamen and marines, with some Company's artillery, 500 volunteer sepoys, and a detachment of pioneers under Lieutenant Abbott.

Major Geils was chief engineer.

On 4th January, the squadron anchored in Trincomalee Bay. The next day the Marines, with two 18-pounders, and Artillery were landed about three miles to the north of Trin-

comalee Fort, and by evening the whole force had landed, under command of Captain Gell, of the *Minorca*. Trincomalee Fort was taken by surprise the same night. The principal part of the garrison retired to Fort Ostenburg, on the top of a high hill, which commands the entrance to the harbour.

On the 7th, Major Geils, the chief engineer, with the field officer, reconnoitred the heights near Ostenburg Fort, endeavouring to find a passage for the troops and field-pieces; and on the 8th the whole moved off towards the fort, and with great labour and fatigue on the 9th, got possession of a hill not more than 300 paces from it, but found it impracticable to get heavy guns up. Under these circumstances, the Admiral summoned the Governor to surrender, and that he might get as exact information as possible of the real state of the place, he ordered Major Geils to carry the summons. This he did, and reported on his return that it might be taken by assault, but desired, at the same time, that a second summons might be sent by him, in order that he might be more exact in his observations on the defence of the place. It seems strange that Geils was allowed in without being blindfolded. This was done on the 10th, but the Governor still persisting in his resolution to defend his post to the last, it was determined to assault it. Accordingly, at gun-fire on the 11th, it was assaulted with bravery, and the enemy driven from their guns and posts in a very short time, but not without considerable loss on our part—one officer and twenty men being killed, and two officers and forty men wounded. The enemy lost only thirteen men killed, including two officers.

The Governor, 9 officers, 250 infantry, 50 artillery, 55 European seamen, 80 Chinese and Malays, and 10 artificers were taken prisoners.

Two of the enemy's ships were found in the harbour richly laden.

Sir Edward Hughes resolved to remain with his squadron, having garrisoned the two forts with the detachment of

volunteer sepoys and artillery, under the command of Captain Bonneveaux.

On 30th July, Captain George Banks and Mr. Robert Watson, and Mr. Crawford Lennox, of the Engineers, were ordered to proceed to Trincomalee, while Mr. Collins Tyson was to relieve Mr. Watson at Negapatam.

While Coote's army was in winter quarters, it had chiefly been employed in escorting grain to Poonamalee and Tripassore, for the relief of Vellore.

Early in January, Coote marched by the Sholinghur Road with the right flank of the army, on the Pollam Hills. Hyder tried his utmost to clog our efforts, and cut off the escort; but all his endeavours proved ineffectual, and we relieved Vellore on 11th January, with six months' rice.

During the skirmishes on the march, we lost three subalterns, and seventy men killed and wounded.

Hyder then resolved to lay a snare for us on our return to the Presidency. Our route lay alongside a tank, and Hyder gave orders for the sluices to be opened, and caused the ground below it to be swamped for a breadth of about 500 yards. This ground he caused to be trampled down till it became almost impassable for infantry; opposite to this ground was a semicircle of rising ground, about a mile in length.

Upon this, Hyder placed large batteries of 24-pounders and field artillery, cautiously masked by brushwood.

On the 13th, we left Vellore, and returning the same road without the least suspicion of these hostile preparations, our line entered the slough, which it was permitted to pass, till the European Brigade, then nearly in the centre, had got quite entangled in the mud; upon this, upwards of fifty guns opened furiously on us. Our troops, however, showed great firmness, and with great regularity and briskness pushed forward, and formed the other side. Hyder being thus frustrated, drew off his guns, and retreated under the walls of Arcot, leaving us to

continue our march to Poonamalee, where we arrived on the 20th January 1782, having lost on this expedition six officers, thirty Europeans, and 100 sepoys killed and wounded.

While Coote was engaged in foiling Hyder, Tippoo, with an army of 20,000 horse and foot, and twenty guns, accompanied by M. Lally and 400 French soldiers, entered the Tanjore country, and unexpectedly surrounded a detachment of the southern army, commanded by Colonel Braithwaite (consisting of 1,400 infantry, 200 horse, and eight guns and one howitzer), which was encamped near Combaconum.

Braithwaite's force consisted of:—

Cavalry	200
Infantry attached	150
European infantry	50
European and Native Artillery	80
Sepoys	1,200
	1,680

And 21 officers, including the General.

Six 6-pounders,
Two 3-pounders (gallopers),
One howitzer.

On 8th February, Colonel Braithwaite (having lost his aide-de-camp by death on the 7th), nominated Lieutenant Charles Salmon, of the Engineers, to that duty. He was not present at Braithwaite's defeat, but on the 17th, was on his way to join him, when the disaster occurred.

On the 19th, he wrote a minute account of the defeat, from which the following particulars have been extracted.

The army surrendered on 18th February, at 12 o'clock, at Arlangoody, four miles from Pandanalore.

"I (Lieutenant Salmon) was proceeding to join Colonel Braithwaite, as his side-de-camp, and had got as far as Sholaverum, halfway between, at 9 A.M., when I heard a very heavy

cannonade, and, soon after, quick platoon-firing. As I had 2,000 pagodas with me, besides a very slender escort, and no intelligence, I thought it prudent to return to the fortified pagoda at Combaconum, where we had two companies of sepoys, informing Colonel Braithwaite, at the same time, of the steps I had taken. The next morning I had a 'chit'* from him.

"'We have had a very hard day of it; have kept our ground, but are surrounded. Do what the bearer tells you.' On questioning the bearer, he assured me he had no instructions except to deliver the 'chit.' He left the camp at 10 P.M., and said they seemed in great confusion, and were preparing to move, and that he heard a great deal of firing two hours after. It appears the Colonel attempted to retire in the night, but it was then too late, being surrounded and closely watched by the enemy. He marched about 10, with two battalions of sepoys, leaving the cavalry and 13th Battalion on the ground, who were ordered to make a show of entrenching, and two hours after to follow him.

"His intention was, I believe, to retreat to Negapatam, as he advanced to Mayaveram; but he soon found that the enemy had got between him, and the 13th Battalion; he therefore returned, and re-joined them with great difficulty, being obliged to fight all the way back.

"It was day-break when the Colonel re-joined, when guns were opened from every quarter on them. They sustained this cannonade, and were also engaged with the infantry, till 11 o'clock, when the Colonel, finding if he remained any longer on that ground his destruction would be inevitable, marched off, and pushed for Manargoody, about a mile from camp, and he had nearly gained it, when one of the battalions of Tanjore Grenadiers, seeing a large body of the enemy advancing to charge them, made a run for the pagoda, leaving their guns

* A note.

behind them. This occasioned great confusion, when the enemy cut in amongst them, and did great execution. Colonel Braithwaite, at this time, received a sabre-wound across the back from a horseman. The 13th Battalion in the rear did extremely well, and made their way good to the pagoda. The sepoys, who had been two days without provisions, and fighting almost the whole time against such a superior force, were so disheartened, that they called out for "cowl" (quarter). There was a consultation of the officers, and the result was that they offered to surrender at discretion. All the officers, except Lend, are wounded. Mr. Stuart's 'boy'* is come in, who says he saw his master killed. Some sepoys of the 10th say he is only wounded."

This action lasted twenty-six hours, before the troops were vanquished. Of twenty-one officers, twelve were killed and seven wounded. {Amongst Engrs one was killed: the other was wounded and taken}

The Southern Army was so weakened by this disaster, as to be incapable, for some time, of appearing openly in the field.

Lieutenant Salmon, having written to Captain Alcock, commanding at Tanjore, and to Mr. Sullivan, the Civil officer, and having sent all the money to Tanjore, was ordered by Alcock to retreat on Tanjore. This he at once did, and succeeded in bringing into the fort the two companies of sepoys, from the fortified pagoda at Combaconum; as well as the three which Ensign Salmon had at Triviar.

Tippoo marched at once to Porto Novo, where most of the French fleet had put in after the last action, in a very shattered condition. All the infantry, and marines of the fleet, were disembarked, and joined Tippoo on 10th March, who with this reinforcement marched against Cuddalore, which capitulated, by orders from the Presidency, without a shot being fired.

* Servant.

CHAPTER VIII.

Expedition to the Cape of Good Hope.—Suffrein proceeds to India.—Captain Byres made prisoner in the *Hannibal*.—Admiral Hughes at Madras.—Naval action off Sadras.—Byres writes to Coote regarding exchange.—He appeals to the Governor.—Coote's army.—Naval battle at Battacolo.—Ross rejoins as Chief Engineer.—Coote's campaign.—Battle of Arnee.—Our Grand Guard cut to pieces.—Naval action near Negapatam.—Reinforcement for Trincomalee.—Suffrein attacks Trincomalee, which capitulates.—Court-martial thereon.—Bank, honourably acquitted.—Naval action near Trincomalee.—Peace with Mahrattas and negotiations with Hyder.—Vellore relieved.—Colonel Lang sent to command Southern Army.—Expedition against Cuddalore.—Coote taken ill.—Expedition abandoned.—Tippoo defeated at [illegible] and wounded.—Expedition to destroy Wandiwash and Carangooly.—Negapatam destroyed.—Movements from Bombay.—Force under Colonel Lang.—Siege of Caroor.—Aravacoorchy captured.—Taking of Dindigul.—Colonel Fullarton takes command of the Southern Army.—Death of Coote.—Darapooram captured.—Stuart takes up position before Cuddalore.—Assault on enemy's works.—General Stuart's after-orders.—Council of War.—Naval engagement between Suffrein and Hughes.—Governor complains of Stuart's dilatoriness.—General Stuart resigns command of Company's troops.—General Stuart arrested by the Governor.—Arrest of General Burgoyne.—General Stuart sent prisoner to England.—Armies march to winter quarters.—Perdaloorcoorchy attacked.—Assault repulsed and the place abandoned.—"Carohy" taken possession of.—Fullarton resolves to take Pulghaut.—Pettah occupied.—Palghaut captured.—Coimbatore surrenders.—Colonel Campbell surrenders Mangalore.—Losses of Engineers.

At the beginning of 1781, the British Government projected an attack on the Dutch possessions at the Cape. The expedition

was committed to the charge of Commodore Johnstone, with ten sail-of-the-line, three 50-gun ships, and three frigates, with a small land-force under general Medows. Colonel Patrick Ross, Chief Engineer of Madras, being in England, went with the expedition, as well as ~~Ensign~~ Capt. William Collins Tyson, also of Madras Engineers. It was intended that the proposed expedition should be kept secret, but the French heard of it through a very skilful spy of theirs called Delamotte* (afterwards detected and hanged). They accordingly prepared a more powerful squadron at Brest. Johnstone left Spithead on 13th March 1781, and on the 22nd, Admiral Suffrein started from Brest in pursuit.

The British Commodore had, according to orders, put into Porto Praya, Cape Verde islands, for provisions, and was lying there unsuspicious of danger. On 16th April, the French squadron was seen in the distance. When this was discovered, the Commodore and 1,500 of his men were on shore; but before the French could come near enough, all these were on board, and the English ships ranged in the best possible manner. At 11 o'clock, Suffrein led into the bay, and attacked with great vigour, but was met by a gallantry equal to his own.

After two hours of fierce fighting, the French withdrew with the loss three times as great as ours, owing to the rapidity and precision of our fire. They, however, managed to capture the *Hinchenbrooke*, East Indiaman, but she was retaken by the English next day. Johnstone prepared to pursue, but found that the *Isis*, 50, Captain Sutton, was so crippled, in rigging and masts, as to be unable to obey. While he was waiting, the precious moments slipped by, and he determined to advance only at the a similar speed as the merchantmen. Suffrein's pace was delayed by a similar cause. Johnstone was so annoyed at having been forced to let the enemy escape, that he brought Captain Sutton to a court-martial; he was honourably acquitted.

* This man is principal character in Thackeray's last and unfinished novel, *Denis Duval*.

Johnstone, on his way to the Cape after this, captured a Dutch East Indiaman, and heard that Suffrein had reached the Cape; but at the same time he learnt that a squadron of five large Dutch vessels, laden with the richest produce of India and China, were lying in Saldanha Bay, about 100 miles north of the Cape; he at once made sail for them. The enemy were well armed with twenty to twenty-four guns each, although of course not strong enough to engage with Johnstone. They were unable to escape, or to unload their cargoes, so they ran their ships ashore, and set fire to them. Our men boarded them, put out the fires on all but one, and as high water floated them, towed them off in triumph.

As it was now impossible to attack the Cape with any chance of success, Johnstone divided his squadron, sending part to reinforce Sir E. Hughes, under Commodore Alves, returning himself to England with the remainder. After the engagement at Porto Praya, Tyson returned to England in the *Hastings*, so I presume he was wounded in the engagement.

The fleet having met with severe weather while steering for Bombay, Commodore Alves selected four men-of-war, and his best sailing transports, with 700 of 98th Regiment under Lieutenant-Colonel Fullarton, and, accompanied by General Medows, pushed for Trincomalee, where they joined Hughes in the beginning of February 1782, about a month after he had captured the place.

Colonel Ross,* however, went on to Bombay with the remainder of the squadron.

The fleet, after passing the Cape, had proceeded by the Mozambique channel, touching at Johanna, one of the Comoro islands between Mozambique and the north of Madagascar.

Meantime Suffrein proceeded to the Mauritius, and having been strengthened by a powerful reinforcement from that place

* He did not reach Madras till the middle of May 1782, fourteen months after leaving England.

went on to India. His fleet consisted of twelve line-of-battle ships, four frigates (including a captured one of ours, the *Hannibal*), one bomb, one cutter, five captured vessels, and eight large armed transports with 3,000 troops under Monsieur Duchemin.

While on his way from the Mauritius he effected the capture of the *Hannibal*, 50, Captain John Byres of Madras Engineers, with some other officers being on board, were made prisoners. It appears that having been appointed a Sub-Director and Captain of Engineers in June 1781, he embarked on the *Deptford*, and arriving at St. Helena found H.M.'s frigate *Hannibal*, Captain A. Christie, about to sail singly and immediately to Madras. Captain Christie offered him a passage. They left St. Helena on 22nd November, and on 22nd January 1782 were surrounded, and taken by the French fleet under Suffrein, fifteen or sixteen days before the latter appeared before Pulicat.

Suffrein's object was to blockade Madras by sea, while Hyder Ali attacked it by land. On 8th February, however, Sir Edward Hughes appeared with nine line-of-battle ships, one frigate, and one fire-ship, and anchored abreast of Madras, taking on board as marines, 300 officers and men of the 98th.

On 15th February, the French steered towards Madras Roads. When they saw Hughes' fleet and his firm attitude they declined an engagement, and stood for the south. Sir E. Hughes pursued. On the 16th, he found the enemy had separated during the night. He captured six vessels, five of which had been taken north of Madras; the sixth was the *Lauriston*, captured by the *Isis* (so much damaged at Port Praya). Many French officers, and 300 men of the Regiment of Lausanne, and a valuable cargo of military stores were captured. On the 17th a hot action took place between the two fleets off Sadras. It was not decisive, but was well fought on both sides. Our squadron went to Trincomalee, and thence soon returned to Madras. In our fleet 137 men were killed and wounded.

The French fleet put into Porto Novo. Tippoo Sahib, after his signal victory over Braithwaite, marched at once to Porto Novo, and on the 10th March 1782 all the infantry and marines of the French fleet joined him, when he immediately marched against Cuddalore, which capitulated, as already mentioned in the previous chapter.

Captain Byres, with two other officers, Major Russell and Captain Young, having remained prisoners on board a French man-of-war till 22nd March, must have been present at the naval action off Sadras. Byres (in a high fever) was then sent on shore by the French Admiral on his parole at Porto Novo, with the other two officers to go to Tranquebar, but not beyond its limits. He was in hopes of being exchanged with an officer taken in the *Lauriston*, and wrote accordingly to the Commander-in-Chief, Sir Eyre Coote.

The French, finding that some of their men had been sent to Bengal, threatened to send the officers to Batavia, or the Isle of France. However, after a time, Byres was allowed to go to Madras on parole, on account of his illness, on 29th May, and again addressed Sir Eyre Coote on 1st June, asking to be exchanged for the Chevalier de Rozcour, a captain in Legion of Lauzun, who was captured prior to the landing of the French troops on the coast. On the 18th June, he received a reply that Sir Eyre Coote was sorry "for his irksome situation, but that the officers and soldiers captured in the beginning of the war, and even now in chains, experiencing the most unheard-of cruelties, claim my prior attention whensoever a cartel may be finally settled."

On Sir Eyre Coote returning to Madras, Byres waited on him, and said, "He hoped the cartel settled in Europe would be adopted in all its parts as it had been in part, a number of French surgeons having been permitted to go." The Commander-in-Chief said, "Were you my brother I would not exchange you, nor will I exchange any prisoners with the French till all those taken in the beginning of the war by Hyder Ali are first

exchanged." Byres then asked to be allowed to serve in the north, where there were no French; but Coote replied, that he could not allow him to serve, as we were liable to be attacked by the French anywhere. On 5th October 1782, Byres appealed to the Governor, Lord Macartney, but was not, I believe, released from his parole till the end of the war.

Meantime, Coote's army had been kept by the Council for three months at St. Thomas' Mount, when, by a march to Porto Novo, it might have opposed the junction of the French and Tippoo; or at any rate prevented the fall of Cuddalore.*

At last Coote, after being joined in end of April 1782 by 78th Highlanders, 800 strong, marched south by Carangooly and Wandiwash towards the confederates, then encamped on Red Hills of Pondicherry.

After the junction had been effected between Tippoo and the French, Monsieur Suffrein sailed to Battacolo, a port in Ceylon, about seventy miles south of Trincomalee.

The British squadron was reinforced by two ships of the line and some Indiamen.

Sir E. Hughes, having equipped his fleet, and taken on board remainder of 98th to complete his marines, sallied forth in search of the enemy. General Medows accompanied the Admiral as a volunteer. The British Admiral fell in with the fleet (French) just as they had set sail from Battacolo, on 9th April, and on the 12th a memorable and bloody battle ensued.

This action was perhaps the hottest in which the navies of either country were ever engaged. The battle continued till the close of day put an end to it.

In the British fleet 137 were killed, and
430 wounded;

Total 567

* Wickens was present with Coote's army; Johnstone was at Negapatam, and Salmon at Tanjore, Banks being at Trichinopoly.

Both squadrons remained where the action had been fought, but neither were in a position to renew the battle.

Their ships were greatly shattered, and the men overpowered with fatigue.

In this manner both fleets lay till the 19th, when the enemy stood off towards Battacolo to refit, and Hughes, a few days after, entered Trincomalee. Great sickness prevailed in the English squadron, and Hughes was obliged to remain at Trincomalee till June.

About the middle of May, Lieutenant-Colonel Ross took up his post as Chief Engineer, and shortly after requested that he might be allowed pay from the time the squadron entered Saldanha Bay. The Governor in reply expressed his approval of Lieutenant-Colonel Ross's conduct during the voyage from England, but said that his request must be referred home.

To return to Coote. After two days' march from Wandiwash we got a full view of the enemy, and in order to separate the confederates, Coote suddenly changed his route to the west, and encamped before Chittapet. This had the desired effect, for Hyder hastened to its relief, leaving his French allies behind him. Coote then struck off for Arnee. This caused Hyder to redouble his expedition in pursuit, and on 2nd June, when we were about three miles from that fort, his advanced parties came up with our rear-guard, and opened upon it with twenty guns. Colonel Elphinstone maintained his ground, and Coote formed the army into a single line by causing the troops to face about and file off to the left of the rear battalion, having posted a brigade of infantry and the cavalry under Colonel Owen to protect the baggage in the rear.

As soon as the line was formed, it made a rapid advance upon the enemy's guns.

The Mysoreans soon retreated, but renewed the cannonade,

whilst the British were obliged to halt till Owen came up with the baggage. This being done, we again advanced on the enemy, who retreated across the River Cheear; but they were so closely pursued, that seven tumbrils were taken by the 73rd. A battalion of the Bengal sepoys on the left advanced likewise, and captured a gun. Coote, seeing both these regiments in pursuit, ordered the European Grenadiers to their support, with the light infantry, a regiment of cavalry, and some guns, which pursued the enemy a little further, and then returned to the line.

About 150 officers and men were killed and wounded in this affair. The British army encamped that night on the field of battle, and next day sat down before Arnee to besiege it; but the scarcity of grain again forced Coote expeditiously to Madras.

On our return from Arnee at Niddingul, we lost our grand guard, consisting of one regiment black cavalry, two guns, and 100 infantry.

Hyder sent in sight a few loaded elephants and camels to attract their attention, keeping his main body of cavalry concealed in the woods. The bait induced the officer in command to quit his post. Hyder's cavalry immediately rushed out on them, and, notwithstanding a gallant defence, the whole were cut to pieces.

The army proceeded to Wandewash, and on the 20th June reached the Mount.

The casualties on this expedition, were at—

Arnee	150
Seaforth's corps, from heat and fatigue .	150
And the Grand Guard	300
Total .	600

Admiral Suffrein now determined to lay siege to Negapatam.

Sir Edward Hughes apprehended his design, and towards the end of June moved his squadron to Negapatam.

On 5th July, the French fleet, of twelve ships of the line, besides frigates, came in sight; on the 6th, a very warm engagement took place.

The French Admiral, from the misconduct of some of his captains, had to withdraw, and pushed for Cuddalore. Our fleet returned to Negapatam, and then to Madras, where Hughes remained refitting till the 20th August. In the meantime, he despatched two of his best sailing ships, with 200 men from the 42nd and 78th, commanded by Captain Hay MacDowell, to reinforce Trincomalee.

This officer superseded Captain Bonneveaux.

The detachment arrived in safety, and the ships rejoined Hughes on 12th August.

With this detachment Captain Banks was sent; also Mr. Robert Watson, and Mr. Crawford Lennox, all of the Engineers.

On Captain MacDowell's arrival, he found the two forts, but particularly the lower one, in a very weak state of defence, and the stores and ammunition so injudiciously distributed, that the greatest part of the powder lay in one of the forts, while the balls were lodged in the other. Captain MacDowell had scarcely begun to remedy this evil, when he found himself besieged by Suffrein, who had sailed from Cuddalore to Battacolo, and thence, having received reinforcements, quickly laid siege to Trincomalee. MacDowell made as good a stand as he could, and then capitulated on 30th August.

A court of inquiry was held to examine the conduct of officers lately at Trincomalee and Fort Ostenburg. The following officers attended: Captains MacDowell, Bonneveaux, and Banks (Madras Engineers), Captain-Lieutenants Sutcliffe and Saxon (Artillery).

The Court reported that there were grounds for a court-martial respecting surrender of Trincomalee.

Captain Bonneveaux, Commanding and Acting Chief Engineer

(before arrival of Captain Banks), tried for neglect of duty in not putting forts into a proper state, considering the number of people employed and money charged. Acquitted.

Captain MacDowell, tried for surrendering Fort Trincomalee to the French under Monsieur Suffrein on 30th August 1782. Acquitted.

Captain Banks, Sub-Director of Engineers and Chief Engineer, tried for not taking measures in time to defend Trincomalee. Honourably acquitted.

Captain-Lieutenant Saxon, for not availing himself of guns, shots, &c. Guilty; suspended for six months.

Three days after Trincomalee had capitulated, Sir E. Hughes appeared off the place, and another action took place between the fleets on 3rd September.

The French lost 1,100 men killed and wounded, while we only lost 318.

Suffrein publicly disgraced seven of his captains for misconduct, and his fleet, in a very unmanageable condition, set sail for Trincomalee. That night the *L'Orient* sank, and two others stuck upon the rocks, but were got off again, after sustaining considerable damage.

The British fleet was too disabled to pursue.

Peace had now been made with the Mahrattas, it having been ratified at Poona in the middle of May. It was stipulated that Hyder should at once evacuate the Carnatic. If he should decline to do so, both parties to the treaty were to unite, and effect his expulsion. An expedition was accordingly taken to Wandewash for the purpose of negotiating with him. Hyder found himself so well supported by the French, that he rejected our proposals, and, after a month's fruitless negotiations, we returned to Madras.

Another excursion to the relief of Vellore succeeded, and seven month's rice was thrown in on 5th August, and on the 20th, the army again retired to the Presidency.

Colonel Lang was now sent to command the Southern Army, with a detachment of 600 of 78th, and the Madras Europeans. These went to Negapatam by sea, and joined the Southern Army, which now again began to appear outside Tanjore.

Hyder, meantime, lay encamped at Cuddalore, until his army had consumed all the forage in the neighbourhood, and then he was forced to retire nearer to Trinomally.

Lord Macartney now resolved on the reduction of Cuddalore, and collected vessels to carry rice, &c., for the siege. Hughes engaged to occupy Suffrein.

Coote began his march south on 26th August, with ten days' rice for the army, and arrived at Pondicherry Red Hills on 4th September, where he was to wait for supplies from the rice ships. On the day on which Coote distributed his last ration of grain to the troops, Lord Macartney's rice ships, which ought to have been at Pondicherry on the 10th, had not then passed Madras, and Coote, with great reluctance, had to abandon the expedition.

Coote was suddenly taken ill, and was not only obliged to quit the army, but to retire to Bengal for the recovery of his health. The command devolved on General Stuart, who began his retreat to Madras on evening of 10th September.

On 15th October, a violent monsoon storm came on, and flooded the camp. At this time the British fleet was in Madras Roads, and, the gale increasing, put to sea. The admiral, who was at the time giving an entertainment on board the *Superb*, was under the necessity of carrying his guests to sea with him.

After the storm abated, the army broke up, and marched into cantonments on Choultry Plain, and St. Thomé, and Hyder retired to Arcot and its environs.

Sir Richard Bickerton now made his appearance in the Madras Roads with a reinforcement of five line-of-battle ships and ten Indiamen, with 23rd Light Dragoons, 101st and 102nd

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Regiments; and 15th Hanoverians, also 200 recruits for 73rd and 78th, and 500 newly-raised men for the Company's service. These joined the army, and Bickerton sailed for Bombay, where he arrived as soon as Sir Edward Hughes' squadron.

At this time, owing to a very severe famine, provisions were very scarce, and the allowances to the army, after the arrival of these reinforcements, had to be reduced while the main army was in cantonments at Madras.

Colonel Humberstone ~~Mackenzie~~ endeavoured to draw Hyder from the Carnatic, by operations on the Western Coast.

Colonel H. ~~Mackenzie~~ overthrew 1,500 of the enemy in battle, took Trincolore, and then marched to Calicut. His force, having been increased to 900 Europeans and 2,000 Bombay sepoys, joined by 1,000 irregulars sent by the King of Travancore, besides eighteen guns, made an attempt to penetrate into Mysore.

He proceeded to Palghaut with great expedition, but there learnt that he would be opposed by a superior force under Tippoo, accompanied by M. Lally. He resolved on a retreat; but it had no sooner commenced, than furious attacks were made by matchlock infantry, and cavalry, who hung upon his rear, and took baggage and cattle. At Ponany, Colonel ~~Mackenzie~~ tood post, and threw up entrenchments. Twenty-four hours after, Tippoo arrived, and made a general attack on 28th November. Colonel ~~Macleod~~ at this instant arrived with ~~the~~ battalion of the 42nd, and took command. Tippoo was completely defeated, and he himself wounded in the thigh. His troops dispersed. Tippoo hastened back to the main army, but before he reached Vellore, Hyder's death was announced to him.

Hyder had been for some time in declining health, and upon 7th December 1782, Tippoo was proclaimed Nabob of Mysore.

Hyder had lately made overtures of peace to us; but Tippoo no sooner found himself at the head of the Mysore army, than

he dropped the negotiation, gave every assurance to the French of his attachment to them, and of his determination of prosecuting a vigorous war against the English.

At end of July 1782, the Corps of Engineers was composed of the following Officers :—

Lieutenant-Colonel Patrick Ross, lately returned from Europe.
Major George Maule, doing duty at Madras.
„ Thomas Geils, at home, supernumerary.
Captain James Johnstone, Negapatam.
„ George Banks, Trincomalee.
„ John ~~Byers~~, prisoner on parole.
„ William Gent, Ganjam.
„ William Prescott, Masulipatam.
Lieutenant Charles Salmon, Tanjore.
„ Simon ~~Stuart~~, prisoner on parole.
„ John Wickens, with the army under Coote.
Ensign Elisha Trapaud, Bencoolin.*
„ John Adam Kissleback, Nellore.
„ George Bong, Pulicat.
„ Charles Parsons Ogg, sick at Madras.
„ Jacob Hemming, sick at Madras.
„ William Collins Tyson, Negapatam.
„ John Guthrie, Pulicat.
„ Daniel Jennings, Madras.
„ Robert Watson, Trincomalee.
„ ~~Crawford Lennox~~, Trincomalee.

At this time Lieutenant Bentson was assistant engineer at Masulipatam, although not an officer of Engineers.

Lieutenant Colonel Ross, after his return,* asked for a brevet of colonel, to place him in his proper position in the army, just before Colonel James, of the Artillery, who had meantime

* Lieutenant-Colonel Ross at this time recommended that Robert Prescott and John Norris should be removed from Infantry to Engineers, they having applied for the transfer and being well qualified.

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BATTLE OF CUDDALORE.

Gained by 11,000 British Troops, under Major-General Stuart, over 11,000 French and Mysorians, under Mons. Bussy, on the 15th June, 1783.

REFERENCES.

A A A A.—*The French Lines, and Position of their Troops before the* [illegible]. B B B.—*Disposition of the British Troops the Night before the Attack of the* [illegible] *Lines.* C C C.—*Route of Col. Kelly over the Hills, early in the Morning of the 13th, and his* [illegible] *of the French Battery D, upon a hill.* E.—*Col.* [illegible]*'s Battery of Six* [illegible]*-pr.* [illegible] *Major Mackay's Battery of Four 12-prs.* G.—*Capt. Montague's Battery of Six 18-prs.* H.—[illegible] *large French Redoubt, to which the 101st and Hanoverians advanced.* I.—*Position of* [illegible] *Brigade after dispersing Tippoo's Troops.* K.—*Route and First Position of the Grenadiers and* [illegible] *Regiment.* L.—*Advance of the Centre Division under Col. Elphinstone.* M.—*Rally of the Centre Division after they retreated.* N.—*Track and Advance of the Grenadiers and Highlanders,* [illegible] *by the Sepoys and Kelly's Brigade.* O.—*First Parallel of the British.* P.—[illegible] *by the Enemy on the 25th.* Q.—*Choultry and Tree, to which the British and French Officers* [illegible] *in the Evenings, for Conversation, after Peace was concluded.*

received the brevet rank. He instances precedents to justify his demands.

The Committee state that they are unable to grant his request, but that it will be referred to the Court of Directors.

On 27th December 1782, Lieutenant-Colonel Ross was ordered to proceed with the army, with such a number of engineers as he might think necessary.*

This order does not appear to have been acted on till January 1783.

The army marched from Vellont on 25th January, and took up their ground at Tannsveram on the 26th.

On 6th February, the army arrived at Carangooly. Lieutenant Wickens, of the Engineers, sank several mines at Carangooly, to complete the demolition of the place.

On the 9th, the army arrived at Wandewash.

On the 13th, General Stuart writes:—"This evening our mines were sprung in the fort, three of which took place completely, all the iron guns were broken, or rendered unservicable; and the small brass guns brought away. About the time of springing the first mine, by some accident the powder magazine blew up, and five or six people were killed and sixty wounded. Lieutenant Wickens was bruised by a fall he got at the time of the explosion."

The whole force of Tippoo was at this time close at hand, and Stuart's army was much harassed by rocket boys.

On the 4th, he writes:—

"I did everything but hang one of the rocket boys, he went through the gallow's ceremony, and was pardoned only at the last."

On the 15th, the outworks at Wandewash were blown up, and all the gates were burnt; the fire continued burning all night.

The place was now a perfect ruin.

* On 8th November 1782, Messrs. Samuel Saunter and Michael Russell were appointed practitioner engineers.

On the 17th, the army encamped at Carangooly, where eleven mines were now ready.

By the 18th, Carangooly was effectually ruined, and everything within the walls thrown down. The place was in flames for fourteen hours.

On 20th February, the army was at Chingleput, and on the 3rd it encamped at Poonamalee.

In this expedition we sustained some considerable loss.

Negapatam Fort, at the close of 1782, was being briskly destroyed—Captain Johnstone, of the Engineers, being engaged on the work. By March 1783, the demolition was complete. The communication between Madras and Negapatam being interrupted by the enemy's troops, Johnstone, together with Captain Donald Campbell (son of Colonel Charles Campbell), embarked in a vessel, and proceeded by sea. As they approached Madras, they were chased by a French frigate, and taken near Fort St. George. The captain of the frigate ordered them to follow, and steered to the north. The order was for some time obeyed; but at length night fell, and a fresh and favourable breeze aiding the attempt, they put about, and ran for Madras, and dropped anchor safely in the roads.

Since the conclusion of peace with the Mahrattas, the Bombay Presidency found themselves able to make more strenuous exertions in favour of Madras than they had hitherto done. On 12th December 1782, General Mathews sailed from Bombay; on the 18th, he landed on the Malabar coast, and took the fort of Rajamundroog by storm, and from thence marched and laid siege to Onore. The breach was deemed practicable on 5th January, and it was assaulted at noon, with success.

On 27th January, he took Bednore, a fort well built and strong, containing seventy pieces of cannon, and immense quantities of powder and ball, with 8,000 stand of arms.

Mangalore was his next object. Tippoo, on hearing this, at once left the Carnatic, and, previous to his departure, blew up

all the forts he possessed in the Carnatic, except Arnee, which was left in charge of Sid Sahib, who had orders to attend the French at Cuddalore with 2,000 cavalry. In return for this, the French sent a corps of 600 men with Tippoo's army, under Monsieur Cousigny.

Meanwhile, Mathews reduced Mangalore, Anantpore &c., leaving Major Campbell with the 42nd Highlanders to garrison Mangalore. He, also, occupied all the other forts he captured.

Thus, instead of destroying the forts he took, and concentrating his force, he frittered away his army in garrisoning a number of places, so that in Bednore, where was his principal division, he had but 400 Europeans and 1,200 sepoys. Tippoo's whole force surrounded Bednore, and the French troops, with Tippoo's Engineers, began their approaches towards Bednore. They met with every opposition that could be suggested by men of experience and valour; but after a Council of War, it was agreed that they should capitulate on honourable terms. The garrison accordingly surrendered on ~~22nd May,~~ the 30th April but the terms of capitulation were disregarded. After the fall of Bednore, every other place gave way in succession to Tippoo, until he arrived at Mangalore, which, owing to the gallant defence by Campbell, put a stop to his victorious career.

About the time General Mathews landed on the western coast, Colonel Lang, with a force of about 6,000 men, was in camp at Munserpett, in an inactive state. It was not until 22nd February, that he was instructed to act on the offensive. At that time he was at Coiladdy.

On 9th March he was directed to co-operate with Mathews. It was at this time that Colonel Fullarton arrived at Negapatam from Tranquebar, to join Colonel Lang. The news at this time received from Mathews, was to the effect, that the enemy had advanced within thirty miles of Bednore, and that he was obliged to act on the defensive, but intended to maintain Bednore.

General Stuart recommended the attack of Cuddalore, and

annihilation of French on this side, as the best means of drawing Tippoo away from the west coast, and thought that Colonel Lang should be ordered to take possession of Chillumbrum and Palamcottah, and engage the Warriorepolliem Poligars to our interest.

On 4th April, General Stuart was urged by the Council to march shortly to Chingleput, and thence against the enemy. General Stuart agreed to obey the orders of Government to march, but threw on them the responsibility of fixing a date, and considered that the time had not yet arrived, as supplies were not sufficiently ready. General Mathews, at this time, called urgently for reinforcements; and on 13th April, the Council asked the opinions of General Stuart and Colonel Pearse. General Stuart protested against reinforcements being sent to West Coast, gave in his plan, and requested that it might be considered. Sir Edward Hughes now arrived with sixteen ships-of-the-line, two frigates, a cutter, and a fire-ship, and it was determined that the army was to march towards Cuddalore on the 20th or 21st. General Stuart insisted that Colonel Lang should join him, and that together, they should attack Cuddalore. The Council at first objected to this proposal, but finally agreed, with the proviso that garrisons were left sufficient to maintain our footing to the south.

The engineers with General Stuart's army were :—

Lieutenant-Colonel Ross, Chief Engineer.
Captain Johnstone.
„ George Banks.
Ensign Hemming.
„ Norris.
„ Dyce.
„ Saunter.
„ Ogg.
„ Jennings.

Lieutenant Wickens was aide-de-camp to Chief Engineer.

Colonel Lang, meantime, had marched against Caroor. He

sat down before the place on 20th March, and was under the necessity of carrying on regular approaches. The place had a good glacis, covered-way, deep dry ditch with revetment, and very high wall. Lieutenant Charles Salmon was the engineer. Every inch of the ground was disputed, until at last we gained the crest of the glacis, and made a lodgment. The enemy suffered severely in attempting to prevent this.

Our losses were as follows:—

1 Lieutenant and 6 Europeans killed.
15 Sepoys ,,
1 Lieutenant and 35 Europeans wounded.
48 Sepoys ,,
Total killed and wounded, 106.

Caroor was taken on 2nd April.

Lang next marched to Aravacoorchy. On the 16th, a battery of three 18-pounders was opened against the fort; by noon there was a tolerable breach, which was instantly stormed by Captain Maitland, at the head of 100 Europeans, and four companies of sepoys. Enemy lost 400, while ours was trifling—only six killed and wounded.

On 4th May, Colonel Lang, still commanding, took the lower fort of Dindigul by storm, at 4 A.M. After we had made a breach in the upper fort, they asked for "Cowle,"* and the Colonel was in possession of the whole fort, which is very strong, by 10 A.M.

Colonels Ross, Lang, and Lieutenant-Colonel Arthur Owen, were in April appointed colonels, but they were to rank under His Majesty's colonels; consequently Colonels Fullarton and Forbes became senior. Colonel Fullarton was ordered to take command of the Southern army, and Colonel Lang to join the Main army.

By this time, General Stuart's army had proceeded south, and on 26th April took possession of Permacoil.

* This means they asked "for quarter."

Here the rest of the army joined him on 2nd May. While encamped on the banks of the Palar, they heard of the death of Coote (who had come from Bengal to take command), in the Madras Roads. The vessel in which he came was chased by a French cruiser for the greater part of the voyage, and this operated so strongly upon the anxious mind of Coote, as to bring on a stroke of palsy, of which he died on 26th April, and Major-General Stuart now became Commander-in-Chief over all the British forces in India. From Permacoil the army advanced to Kilhnore, and received a supply of rice from Condamoor, after which it proceeded to the Red Hills, Pondicherry, where an advanced party of the French were surprised. A very long time had been wasted near Permacoil, waiting for the sailing-squadron, and arrival of our store-ships and reinforcements, under Major-Generals Bruce and Wangenheim. It was the beginning of June before General Stuart was able to proceed; but at length, on 4th June, the British camp was pitched on the banks of the Poniar, five miles west of Cuddalore bound hedge.

The Chief Engineer was employed in making a post at Kilnore Pagoda tenable. It was intended for the storage of rice. On 23rd May, General Stuart wanted to know what orders had been sent to Colonel Fullarton—again insisting on his junction; and on the 31st, sent positive orders to Colonel Fullarton, by Trichinopoly, to move towards the Coleroon. Shortly after, the President disapproved of Colonel Fullarton being ordered to join the main army,* and reminded General Stuart of the reinforcements he had had. (At the end of April 600 Europeans had been sent by sea to reinforce him.)

The President complained of his inaction, and recommended him to advance on Cuddalore.

Colonel Fullarton, on taking command, proceeded to Dara-

* On 21st April, Colonel Fullarton had been ordered to send a detachment to main army if General Stuart should require it.

pooram, and encamped before it on 23rd May, after a march of twelve hours. At 3 A.M., Colonel Fullarton proceeded with some Europeans and two battalions of sepoys to take possession of a very strong post on the west side of the river, within 300 yards of the fort; had his men under cover before daylight; at 8 A.M. opened a small mortar-battery, and before 3 P.M. a three-gun battery. A breach was effected about 6 P.M., and the place was taken at day-break on 1st June. Colonel Fullarton had put Caroor into a state to be readily destroyed, but finding it useful, deprecated its destruction.

On 17th June, Colonel Fullarton was ordered by Lord Macartney, the Governor, not to obey in future any orders of General Stuart, unless confirmed by the Council.

General Stuart, with his army, made a judicious diversion, and passed the Poniar river in view of the whole French line, who did not venture to oppose our passage. Our army passed the Bandapollam Hills on 6th June, and took up a strong camp not two miles from the south face of Cuddalore, situated on a sandy desert, with its right flank resting on the sea, and its left posted against the Bandapollam hills, its front being screened from the fort by plantations of palmira trees, and the brushwood of the bound hedge.

Stuart omitted, however, to take possession of the bound hedge; and during the night of the 7th, Monsieur de Bussy quitted the north side of Cuddalore, and fixed himself in the southern hedge, where he immedialely began with the utmost assiduity to throw up strong redoubts and lines of entrenchments, at the same time advancing his guards and pickets close to our sentries.

Six days elapsed, during which the armies remained watchful of each other—the French busily engaged in fortifying themselves, and the British employed in debarkation of some troops, and landing stores and ammunition.

The Pioneers, &c., under the orders of the Engineers, were

engaged in making fascines, gabions, charcoal, mallets, tool-handles, &c.

On the 11th June, the engineers were employed in carrying down materials and tools to a bank and choultry in front of the left-hand picquet, close under Bandapollam Hills.

During this interval, the Chief Engineer and other field officers were engaged in reconnoitering. Lieutenant-Colonel Kelly passed secretly over the Bandapollam Hills, through almost impenetrable thickets, where he saw the whole dispositions on the enemy's right, and the construction of a new battery on a commanding hill to cover that flank.

On the 7th, the Chief Engineer and the Quartermaster-General had a narrow escape from being shot. They were pushing forward to reconnoitre, when Colonel Ross's horse-keeper was wounded by a cannon-ball, and one of the troopers of the escort was shot.

General Stuart called a Council of War, composed of General Bruce and Colonel Stuart, also the Chief Engineer, and the officers commanding the Bengal and Coast Artillery, to know if everything was ready for an attack. Finding everything prepared, the capture of the outposts and redoubts was resolved on. The General's orders were as follows:—"Major-General Bruce and Colonel Edmonston to command the picket on the right.* Colonels Stuart, Cathcart, and Blane to lead the picket on the left,† and the centre picket,‡ or grand guard, to be led by Colonels Elphinstone and Wangenheim, joined by 101st, Hanoverians, two battalions sepoys, Madras European regiment with a party of Madras pioneers, under Colonel Kelly. Colonel Gordon to command troops off duty, and the reserves, who were to form in front of our camp. The rest of cavalry to be under Colonel Campbell, and wait on the General."

* With the 78th and one battalion sepoys.
† Grenadiers, 73rd, and two battalions sepoys.
‡ One regiment cavalry and one battalion sepoys.

"The artillery attached to right wing, and 6-gun battery on the right to be directed by Captain Montague.

"Lieutenant-Colonel Elliot to command battery of six 18-pounders on our left, within 800 yards of French redoubt.

"Another battery of four 12-pounders, placed still further to the left, to be commanded by Major Mackay."

The General took post in Lieutenant-Colonel Elliot's battery. The attack began at 4 A.M. on 13th June. Lieutenant-Colonel Kelly followed the circuit he had made the preceding day over the Bandapollam Hills (a party of Madras Pioneers were under his command), and gave the first alarm by a brisk attack upon the battery on high ground to west of French redoubt, and succeeded in taking it.

The British flag was instantly hoisted as a signal, and Colonel Elliot and Major Mackay at once opened a furious cannonade on the large redoubt in the centre of the enemy's camp. Colonel Kelly now turned their own guns upon them from the height of which he had taken possession, completely enfiladed the whole line, and threw them into such confusion that Tippoo's sepoys were dispersed, and left an opening for the Grenadiers and Highlanders to fall on the right flank of their European line; while the centre division, under Colonel Elphinstone, attacked the large redoubt in front; and the right wing, under General Bruce, made a corresponding movement from their position. Our left wing had moved round a part of Bandapollam Hills under a very severe cannonade, and lay behind a small hedge (on the ground from which Tippoo's sepoys had fled) until the 101st, Hanoverians had advanced to attack redoubt in front, which kept up such a furious discharge of round shot, grape and musketry, that these two corps were forced to give way, after some of them had mounted the breastwork. The enemy rushed from their works in pursuit, when the Grenadiers and 73rd, who were by this time advancing, availed themselves of this mistake, entered the redoubt from which the French had

sallied, and commenced a heavy fire on their rear. The French, aware now of their error, moved confusedly off to the next battery on their left.

Thus the brunt of this obstinate battle was sustained by the Grenadiers and Highlanders, supported by Colonel Blane with rest of left wing, and Kelly's brigade, who with undaunted courage advanced towards the enemy's left flank, carrying everything before them as they proceeded, though with dreadful loss, as flanking batteries had been placed by the enemy at every convenient spot, behind which they might retire, and which incessantly poured out grape shot and langredge, accompanied by musketry and grenades.

Four more of these batteries and guns were carried by this valiant body before they halted; but at last, finding themselves under the guns of Cuddalore, they desisted, and fell back on the large French redoubt, which, being situated on an eminence, commanded all the rest.

This contest did not end till 6 P.M., when a cessation of firing took place, and both lines lay on their arms to be ready for a renewal of the fight next day.

Eighteen pieces of artillery were taken. The loss on both sides was very heavy. We lost—

14	European officers	...	killed.
40	,,	...	wounded.
6	Native officers	... ...	killed.
14	,,	... ...	wounded.
161	Europeans	... ...	killed.
387	,,	... ...	wounded.
17	,,	... ...	taken prisoners.
52	Native Infantry	...	killed.
277	,,	...	wounded.
1	,,	... ...	taken prisoner.
18	Native Artillery	...	killed.
42	,,	...	wounded.

Total 1,020, of whom 251 were killed.

The French lost—

14 officers killed.
25 „ wounded.
116 Europeans killed.
259 „ wounded.
361 of Tippoo's Natives killed and wounded.

———

Total 775, besides 6 officers and 35 Europeans taken prisoners.

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This last statement is the French account, and probably under the mark.

The following order was issued by General Stuart:—"The Commander-in-Chief having taken minutely to investigate the conduct and execution of the orders and plans in attacking the enemy's outposts, lines and redoubts on the 13th, with the comparative strength, numbers and position of the enemy, composed almost entirely of the best regular troops of France, takes this occasion to give it as his opinion to this brave army in general, that it is not to be equalled by anything he knows or has heard of in modern history, whether we look to extent and entire success, or to the national importance of that day's complete victory. He takes this opportunity to return his thanks to Major-General Bruce, Lieutenant-Colonel Cathcart, Major Moore, and Corps of Grenadiers, and to Colonel Stuart, who supported them with pickets of the left, and under whose command the French redoubt was successfully entered and carried; to Colonel Gordon, who commanded the reserve; to Lieutenant-Colonel Ross, Chief Engineer, to whose abilities he is so much indebted; to Lieutenant-Colonel Kelly; to Lieutenant-Colonel Elliot and Major Mackay, under whom the artillery was so well directed that day. To Captain Lamont and the precious remains of 73rd, and in general to the officers and corps of H.M.'s, and of the Company's troops," &c.

After the business of the 13th our army lay on its arms for

thirty hours, and then steps were taken to fortify the position acquired, the right of which was within a mile of Cuddalore.

The Corps of Engineers was now formed into the following brigades:—

1st Brigade	Captain Banks Ensign Hemming. Ensign Norris.
2nd Brigade	Captain Johnstone. Ensign Dyce. Ensign Saunter.
3rd Brigade	Ensign Ogg. Ensign Jennings.

The Engineer of the trenches was ordered, in future, to make out a report of working parties employed by him.

In the parallel there were Bengal and coast sepoys.

In the redoubt, Pioneers and Lascars.

As an encouragement to followers to assist in providing materials, the following rates were paid:—

For gabions, 4½ feet by 3½ diameter ...	5 fanams.
" 3½ feet by 2½ " ...	4 "
Fascines, 12 feet long	2 "
" 9 "	1½ "
" 6 "	1 "
Bamboos, 12 feet long by 8 inches to 4 inches diameter	1 "
Bamboos, 12 feet long by 2 inches to 3 inches diameter	½ "

By the 24th June, our first parallel, and supporting redoubts were finished. The French having landed some men from their fleet, made an attack on our first parallel. At first our troops fell back a little; but getting in their rear afterwards, made great slaughter among them, and put them completely to the rout, leaving 200 dead, and 30 wounded behind them, besides one colonel, one major, one captain, two drummers, and thirty privates prisoners.

The French in this assault attacked our parallel on the right flank. Their principal attack seems to have been directed to the right of our parallel, but they had no idea we had completed a redoubt there, the fire from which galled them very severely. Our people behaved wonderfully well, and the sepoys mixed their bayonets with those of the French. Nothing could exceed their steadiness.

We had only fifty-three officers and men, killed and wounded.

Killed—Two officers and two Europeans.
,, One Native officer and nine Natives.
Wounded—Two officers and three Europeans.
,, Four Native officers and thirty Natives.

On the same day General Stuart called a meeting, composed of—

Chief Engineer, Lieutenant-Colonel Ross,
Second Engineer, Captain Johnstone,

with Commanding Officer of the Artillery; also the two next in command,—

Lieutenant-Colonel Elliot and Major Mackay,

and Captain Montague.

A statement was received from the Chief Engineer, showing the means we had for duty at arms, and for working parties, and the small quantity of materials ready for carrying on approaches. Considering the enemy's power by land and sea, it was resolved unanimously to abide by strengthening the parallel and redoubt for the present, without making our approaches, so that the enemy might not discover where we meant to erect our batteries, until we had the stock of materials completed sufficient in one day to erect them; and meanwhile we proposed to annoy the enemy's working parties by our field-pieces.

Meantime Tippoo had recovered Bednore, taken General Matthews prisoner, and invested Mangalore. Colonel Fullarton had taken Darapooram on 2nd June. General Stuart still

insisted on Colonel Fullarton joining him before Cuddalore, and sent him positive orders to do so. The Council ordered Colonel Fullarton to recross the river, and continue to the south. Colonel Fullarton was thus placed in a very embarrassing position; but as he had heard of French reinforcements by Suffrein's squadron, he determined on marching towards General Stuart, leaving Colonel Forbes in command of the Southern Provinces. It should have been mentioned before, that Monsieur Suffrein, with fifteen sail, appeared on 14th June. Sir Edward Hughes, then at Porto Novo, dropped down to Cuddalore, and on the 17th, about 4 P.M., a sharp action commenced. Hughes had eighteen sail, and so had the advantage in ships, but the enemy were far superior in men. Our fleet was half manned by natives of India, and sickness prevailed amongst our seamen. Sir Edward maintained the fight till night came on, when he was obliged to steer for Madras. This occasioned great disappointment to General Stuart and the army. Next morning Suffrein's squadron came to anchor in Cuddalore roads, and landed a strong detachment. This naval engagement took place in view of the army.

On 30th June, General Stuart heard from Colonel Fullarton that he might expect him on 5th July.

On 25th June, the President wrote a minute complaining of General Stuart's dilatoriness in not having the army in readiness to march to take advantage of Hyder's death; of the slow progress he made on his march to Cuddalore; of his conduct in ordering Colonel Fullarton to join him; of his procrastination in attacking the enemy's redoubts on the 13th, &c.; and proposed that a flag of truce be sent to M. Bussy of the peace, and that the army should cease hostilities.

The two fleets were preparing for a sixth battle, when in June 1783, news reached India that the preliminaries of peace had been agreed on between all the belligerent Powers.

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The southern army was to be reinforced, and General Stuart to be recalled to the Presidency

Messrs. Sadleir and Staunton were accordingly sent in an English frigate to Cuddalore, to treat with M. Bussy; but no intimation of this was sent to General Stuart, and the Commissioners held no communication with him.

On 1st July he wrote as follows, and complained that "the English frigate had her cartel flag up the whole night; she is anchored in the midst of the French. They continue their working parties, we fire upon them, and they return the compliment, as usual. No message of any sort has been sent us, and though I am Commander-in-Chief, and a member of your Government, I neither have any communication, nor have I any letter later than 17th June, and yet there are twenty letters in this army as late as the 25th." The two English Commissioners had arrived on 30th June, wrote their report of negotiations on 2nd July, and left in *Medea* for Fort St. George on 3rd July, returning to Madras on the 4th. Copies of their letter were sent to the Chief of Tellicherry, Colonel Jones (commanding in the north), Colonel Fullarton, Mr. Sullivan (civil officer in the south), and Major Campbell (commanding at Mangalore), but none was sent to General Stuart.

The Council approved of conduct of the Commissioners. General Stuart was directed to return to Presidency. He declined immediately delivering charge, but knowing of orders sent by the Council to General Bruce regarding cessation of arms, he caused a general order to be published.

On 3rd July, General Stuart resigned to General Bruce the command of the Company's troops, reserving to himself the command of the King's forces. General Stuart wrote to Lord Macartney that "it was an unparalleled injustice and intended affront."

On 4th July, General Bruce ordered Colonel Fullarton to return to Trichinopoly. At this time Captain John Byres

prisoner on parole being released) was appointed engineer at Tanjore, and shortly after joined Colonel Fullarton's force as Chief Engineer. By 24th July the parallels, &c. at Cuddalore were destroyed, and the officers for that duty discontinued. The workmen employed, the pioneers* (under Lieutenant Mitchell) excepted, were to carry down the materials from the park to the river-side on the 25th.

The army marched, Colonel Gordon in command (General Bruce having gone to the Presidency, and Colonel Stuart having command of a detachment from the main army, which left Cuddalore on 25th July to join Colonel Fullarton), the beginning of August by route of Bahore, Red Hills, Killinore, Tindevanum, Acherawauk, and Madranticum, which last place it reached on 9th August, and shortly after returned to Madras, 16th August.

The following arrangements were ordered to take place with regard to the engineers who were present at the siege of Cuddalore.

Lieutenant Colonel Ross, to Madras;
Major Johnstone, on leave;
Captain Banks, to Madras;
Lieutenant Wickens } Carnatic Army;
Ensign Jennings }
" Norris } Madras;
" Saunter }
" Hemming, to Bombay for his health; and
Assistant-Engineer Dyce, to rejoin his corps.

On 27th July, Colonel Fullarton had marched for Dindigul. Colonel Stuart was marching to join him, and on 8th August another powerful reinforcement, of 500 Europeans, and two battalions of sepoys, with artillery, was sent under Colonel Elphinstone.

* Force of pioneers with the main army, 6 non-commissioned officers and 278 men.

While this was taking place, there was much dissension going on in Madras. Lord Macartney behaved very despotically, and General Stuart was seized by a party of sepoys at his own house, and carried a prisoner to Fort St. George. At the same time, Colonel Lang, of the Company's service, was raised to the rank of Lieutenant-General, that he might command over Major-Generals Burgoyne, Campbell, and Ogilvie, of His Majesty's service. General Burgoyne was next arrested and accused of all the heinous crimes that could be suggested (he was afterwards tried, and most honourably acquitted of every charge), while General Stuart was conducted by a guard of sepoys to the shore in a manner very unbecoming the rank of a Commander-in-Chief, put on board the *Fortitude* on 14th October, and sent a prisoner to England.

Such was the unhappy condition of the Presidency at Fort St. George, and the ill-regulated state of the army, when Tippoo's ambassador arrived to treat about peace. The main army marched into winter quarters near Madras, as did the southern forces at Trichinopoly. The northern detachment, which had been for some time (under General Jones) surrounded in their camp, was permitted to retire to Ellore. And thus the operations of 1783 ended.

Lieutenant-Colonel Ross recommended Lieutenant Wickens, for his abilities and merit during the war, to be promoted to Captain. "He was constantly in the field during the war, and was charged with the demolition of Sadras, Wandiwash, and Carangooly. He is the oldest lieutenant in the corps."

The Council were sensible of his merit, but could not promote him, as there was no vacancy.

Colonel Fullarton was now proceeding against the Poligars in the south. He first marched to Mellore, left a strong detachment, and went on 4th August to Shevagunga, twenty miles east from thence. The Rajah paid 40,000 rupees, and gave security for remaining debt—50,000 rupees.

The engineers with Colonel Fullarton's force were Captain Byres and Lieutenant Salmon.

The most powerful of the Poligars in confederacy against our Government, and in alliance with the Dutch, had assembled 12,000 to 14,000 men, and were besieging the fort of Chocumputty. The most important, next to Shevagherry was Cattabomanaig, and he was at Chocumputty, from whence his fort of Pandalumcoorchy, on the south-east of Tinnevelly district, was distant more than seventy miles. Colonel Fullarton moved off from Shevagunga on 8th August to Tropichetty, twenty miles distant, and proceeded to Pandalamcoorchy, which he reached on the 12th—100 miles in four days.

He then sent a flag to ask capitulation, but it was refused. The 18-pounders were halted in rear of embankment facing north-east angle.

A battery was hastily constructed, and in three hours we were ready to open on the bastion. The works were manned with several thousand people. We opened fire on the bastion, but finding delay, owing to its thickness, resolved to breach the adjoining curtain. The enemy kept up a constant fire. It was dark before a practicable breach was effected. The attack was deferred till the rise of the moon. The storming party consisted of two companies of Europeans, supported by 13th and 14th Carnatic Battalions, and remained in rear of the battery. The cavalry, the 1st and Light Infantry Battalions posted at right angles with the other three salient angles, together with a detachment fronting each gateway, to prevent supplies or escape. A strong hedge fronting the breach was now removed; this dangerous service was effected with unusual skill by Ensign Cunningham, commanding the Pioneers, and about 10 P.M. the attack commenced. The defenders opposed us vigorously with pikes and musketry, so that we were obliged to retire, and reached the battery with considerable slaughter on both sides. Steps were taken to renew the assault; but the Poligars, dis-

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heartened with their loss, abandoned the place, and sallied by the east gate. Some of the fugitives were taken prisoners, but many escaped. The breach was covered with dead bodies.

The place contained a large quantity of guns, powder, &c., also 40,000 star pagodas, which were immediately distributed to the troops. Five companies of the 25th Battalion were left to garrison the place.

Colonel Fullarton proceeded to Palamcottah, and thence by Shankarnacoil to Shevagherry. On our arrival, the Poligar retired to his woods, four miles deep, in front of his "comby," or stronghold.

He was joined by Catabomnnaig, and mustered 8,000 or 9,000 men. Colonel Fullarton had an interview with the Shevagherry chief, Catabomanaig, and the deposed Poligar of Choccmputty; but it was not satisfactory, so Colonel Fullarton made dispositions for attack. The contest proved desperate. The attack commenced by Europeans and four battalions of sepoys moving against the embankment which covered the wood. The Poligars opposed us in full force. We, however, got possession of the summit. The Poligars took post on the verge of the adjoining wood, and disputed every step with great loss on both sides. "Finding the comby could not be approached in front, we proceeded to cut a road through dense thickets for three miles to the base of the hill that bounds the "comby" on the west. The Pioneers under Ensign Cunningham laboured with indefatigable industry. Captain Gardner, of 102nd, supported them; and Captain Blacker, with 3rd and 24th Carnatic Battalions, advanced their field-pieces as fast as the road was cleared. We continued to cut our way under an unabating fire from 8,000 Poligars. By sunset, we had opened a passage to the mountain, which is extremely high, rocky, and in many places almost perpendicular. We attacked, and the troops attained the summit. The Poligar parties posted to guard the eminence being routed, after much firing, we descended the other side, and flanked the "comby." The enemy,

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seeing us masters of the mountain, retreated during the night by paths inaccessible to regular troops, and we took possession of this wonderful recess. Two battalions were left to secure magazines, and the army moved to Shevelpatore, within four marches of Madura, a little more than a month after it had left Trichinopoly. Colonel Fullarton informed the principal Poligars "that he would leave on 21st September, but that if they did not return to their allegiance, he would make a vow to 'Siva,' the Gentoo god, whose attribute is vengeance, to march back and spread destruction through every possession of defaulting Poligars."

Vakeels waited on Colonel Fullarton at Trichungalum, and stipulated to pay a sum in lieu of all preceding claims. They also gave bonds for 15,000 pagodas, in consideration of restitution of their forts. Pandalumcoorchy was to be destroyed, guns, &c. removed to Palamcottah, and the road cleared to the comby of Shivagherry to continue open; means of defence to be removed, and our troops always to have access to forts and barriers. Colonel Fullarton then proceeded to Dindigul, *viâ* Madura. On arrival at Dindigul, the order of encampment was in two lines. One European and three sepoy brigades, besides four flank battalions. His artillery consisted of sixty-five pieces of cannon, with field ammunition, and 10,000 battering shot. The Engineer department was stored with besieging tools and other implements. The Pioneer Corps was strengthened. Our cavalry was 1,000; altogether 14,000 fighting men.

The army moved to re-occupy Darapoorum, and in October marched towards Pulney, thirty miles south of Darapooram.

On 16th October, Colonel Fullarton received news of recommencement of hostilities on part of Tippoo against Mangalore, and on the 18th he determined to move west to relieve that place. To do this, he thought it best to take Palghaut, and marched from Pulney, reduced the forts of Comalum, Chucklygherry, and Annamalay, passing through a rich country abounding with

grain, cattle, wood, and rice. At Pullachy the country attains its greatest elevation, and the streams run east and west to Coromandel and Malabar.

From Annamallay our progress was most laborious. We had to force our way through a forest twenty miles in depth, and extending thirty miles across the pass of Palghaut. Our object was to reach Colligoody, west side of the forest, fifteen miles from Palghaut. The brigades were distributed to succeed each other at intervals preceded by pioneers, in order to clear what the advanced body had opened for the guns and stores. Heavy rain fell for fourteen days without intermission, and the troops were exposed without tents.

The advanced corps moved to the bank of the Ponany river, within random shot of the works of Palghaut.

There we took a secure position, and prepared to attack the place.

By 5th November, the main body of the troops arrived; we crossed the river on the 6th, and encamped two miles from the fort, across the great road that leads from Coimbatore.

The Engineers' stores arrived, and a post was established for them, where all the preparations for a siege were collected. Our next object was to circumscribe the besieged. With this view, the pettah on east and north faces of fort was occupied. On each of these faces we carried on an attack. During the whole period of our approaches, and construction of our trenches, parallels, and batteries, the besieged kept up a continuous fire on our covering and working parties. The battering train reached our camp on the 9th, after an immensity of toil. Apprehending much delay from strength of defences and obstinacy of defenders, Colonel Fullarton resolved to attempt the gateway.

It was so strongly flanked and fortified that it appeared secure from any attacks; however, it had no draw-bridge, and on this he founded his hopes of accelerating the siege. The fort

was quadrangular. 528 × 432 feet, each angle defended by a capacious bastion, mounting seven or nine guns, and contained a garrison of 4,000 men

On the 13th, we opened fire with twelve guns and four howitzers, from two batteries, at 400 yards from east and north faces. Before sunset the defences were much damaged, and the fire of the besieged considerably abated.

At night, Captain Maitland took advantage of heavy rain, drove the enemy from the covertway, and pursued them as far as the second gate. There he was stopped, but maintained his ground. The enemy were so much alarmed that they called out for "cowle," and this put us in possession of a fort capable of making a long and desperate resistance.

Our loss was inconsiderable.

Colonel Fullarton garrisoned Palghaut, and re-instated the Zamorin,* in the territory of Palghaut. He, in his report, says:— "Captain Byres, the Chief Engineer, is entitled to my best thanks for his labours and ability."

Palghaut was garrisoned by 19th Battalion, with a few Europeans and irregulars, under Captain Dewar.

"It was found to command a fertile and extensive district, the adjacent forests abounding with the finest teak timber in India. There is likewise a great quantity of sandal-wood in the neighbourhood."

Colonel Fullarton's route from Dindigul to Palghaut was:—

					Miles.
1st September		...	Dindigul	...	—
5th	"	...	Darapooram	...	—
16th	"	...	Allingum	...	—
17th	"	...	Manoor	...	8
18th	"	...	Pulney	...	10
22nd	"	...	Cumbalum	...	10
23rd	"	...	Chinnamabettah	...	10
24th	"	...	Sonnmatore	...	12

* Native Prince of Palghaut country

			Miles.
25th September	...	Pullachy ...	10
26th „	...	near Annamally	10
27th „	...	Annamallay ...	3
28th „	...	Pondapollam ...	5
29th „	...	Colangoody ...	3
		Palghaut ...	15

On 26th November, the army arrived before Coimbatore, and proceeded immediately to erect a battery; but before we had effected a breach the Killadar* surrendered.

Now arrived the most interesting moment of the war. The garrison of Mangalore, under the inestimable commandant, Colonel Campbell, had made a defence seldom equalled and never surpassed. Tippoo had suffered in persevering with the siege during the whole rainy season. At this time Colonel Fullarton intended to go against Sattimangalum and Ardenelli, and thence to Seringapatam; but the Board had unwisely delegated powers of negotiation to commissioners to treat for peace, and he was directed to restore all posts, forts, countries, &c., recently reduced, and retire within limits possessed by us on 26th July. He received these orders on 28th November, two days before he intended to commence his march towards Seringapatam.

He remained for some time at Coimbatore, but receiving fresh instructions to fall back, returned to Palghaut, and in December the army retired towards the southern country, having detached Captain Wheeler and three battalions to escort the stores from Cochin with instructions to evacuate Palghaut, and join Colonel Fullarton by Annamallay and Pulney close to the mountains.

Early in January 1784, the army arrived at Ayryacottah, and Colonel Stuart, with the main division, proceeded to Caroor. Colonel Forbes remained in the districts of Darapooram and

* Military officer in charge of a fort.

Dindigul, while Colonel Kelly advanced to Covanore on the borders of Madura. Colonel Fullarton proceeded with the Covanore division, as most central, to the south on 24th January 1784.

These arrangements had hardly been finished, when he received orders to recommence hostilities. The Zamorin had occupied Palghaut after it was abandoned by Captain Wheeler. Captain Agnew was sent with a battalion of Travancore troops to assist him; but before he arrived, the Zamorin in despair had abandoned it. On north-east border of Tinnevelly, Colonel Fullarton received a letter * from the Commissioners that fully marked the enmity of Tippoo, and convinced him that a rupture was unavoidable; he therefore ordered stores to join Colonel Stuart at Caroor, and marched the same night to Madura. He then went to Tanjore to concert measures with Mr. Sullivan (Chief Civil Officer) for safety of the southern countries, while the army should, for the *third* time, advance into the enemy's country.

Colonel Fullarton rejoined his army at Caroor.†

Tippoo, finding that the southern army had been ordered to abandon his country, naturally persisted in his investment of Mangalore, and the garrison was at last obliged to yield to the necessity of famine, and surrender the place after a most glorious defence. Colonel Campbell marched off with his few remaining troops to Tellicherry, and died soon after, worn out with fatigue. Notwithstanding the flagrant treachery by which Mangalore was lost, and the deliberate massacre of General Mathews, with many other captured English officers, peace was concluded at Mangalore on the 11th March 1784. During the progress of the negotiations, Tippoo treated the English commissioners with most marked indignity. Had Colonel Fullarton

* Dated 11th February near Mangalore.

† On 4th February, Colonel Fullarton directed Captain Byres (as it was likely the war would be resumed) to raise 200 or 300 pioneers with all expedition, independent of those under the command of Lieutenant Cunningham. He succeeded in raising a body of 160.

been allowed to advance on Seringapatam with a force flushed with victory, Tippoo must have left Mangalore for the defence of his capital, and the English would have been in a position to enforce their own terms.

The southern army, during its operations, took 10,000 prisoners.

Colonel Fullarton was ordered to restore Caroor and Darapooram, but to keep Dindigul.

In April 1784, he moved with Colonel Forbes' division to Dindigul, while Colonel Stuart fell back from Caroor on Trichinopoly. While at Dindigul, the troops suffered a continuation of fatigue, as they had to march seventy miles to the head of Cotampollium Valley to get grain for subsistence. By the end of May it became impracticable to subsist so large a force in Dindigul, and Colonel Fullarton withdrew towards Madura, after leaving a strong garrison. Afterwards three battalions were detached under Captain Wheeler to Tinnevelly, and Colonel Fullarton went there himself. From Tinnevelly he returned by Negapatam and Tanjore to Trichinopoly, and thence went to Fort St. George to give an account of affairs, to report the meritorious conduct of the troops, and the eminent exertions of Messrs. Sullivan and Irwin.

In his report he makes the following remarks regarding pioneers and engineers:—

"It is further extremely requisite that your establishment of pioneers should be increased, not only for expertness and despatch in the preparation of a siege, but to facilitate the rapid movement of your armies. Hyder seldom maintained less than 5,000 pioneers."

"The next material object is the Department of Engineers, including not only preparations for besieging, but also the defensive condition of your forts. You have a respectable corps of engineers under an officer distinguished for his talents of arrangements—Lieutenant-Colonel Ross."

He again writes (in January 1785):—

"Of all the southern garrisons which are the most important in your country, the inspection and descriptive reports are long ago completed; for as soon as the army returned from the enemy's country, I requested Captain Byres, Chief Engineer to the South, to undertake a survey of Tanjore, Trichinopoly, Madura, Palamcotah and Ramnad. This he executed with the utmost ability, and accompanied it with a statement expressed in accurate and comprehensive terms."

Colonel Fullarton recommended the Governor to distribute his force into three great frontier cantonments;* [illegible], or central one, between Arcot and Vellore; southern one, near Trichinopoly; and the third at Ellore.

On the 10th October 1783, the state of the Engineer Corps was as follows:—

	1 Lieutenant-Colonel.
	1 Major.
	4 Captains.
	4 Lieutenants.
	13 Ensigns.
Total	23

Lieutenant-Colonel Patrick Ross.
Major Maule (not counted, as he had just gone home).
,, Johnstone.
Captain Banks.
,, Byres.
,, Gent.
,, Prescott.
,, Stuart, Supy.
Lieutenant Salmon.
,, Wickens.
,, Kisselbach.
,, Trapaud.

* To defend the Circars, or act against Tippoo's possessions of Cuddapah or Kurnool.

Ensign Ogg.
„ Ryland.
„ Bong.
„ Guthrie.
„ Hemming.
„ Jennings.
„ Norris.
„ Russell.
„ Prescott.
„ Lennon.
„ Sauter.
„ Mackenzie.

Lieutenant Wickens seems to have been a very able officer, and was frequently despatched on important work in connection with the campaign. Thus on 13th March 1783, he was sent with a detachment across the Palar to inspect Arcot, and take a sketch, &c.; a few days after, he was ordered to Conjeveram, and sent in a report regarding the fortifications required for the Great Pagoda at that place.

The same month, he reports on the hill forts at Vellore, and sends in a rough plan of Arcot, with observations, on 4th June.

Lieutenant-Colonel Ross complained of being superseded by Colonel Nixon, and asked for brevet rank. General Stuart supported his application, and said that "there is not an officer on the establishment who deserves any mark of attention in that way more preferable."

The President, however, refused the appli[illegible], which is hardly to be wondered at, considering th[illegible]ad feeling existing between the President and General Stu[illegible] the time.

In September, Major Maule applied [illegible]ave to Europe, as "he was suffering from liver and [illegible]al affections, after a service of sixteen years." [illegible]he [illegible]e, but was recommended to the Cour[illegible]

Johnstone was promoted to Major and Stuart to Captain. Trapaud was still absent at Fort Marlborough, Bencoolen, and Simon Stuart had not yet returned from parole.

In January 1784, Major Johnstone went to Europe on account of his health, and Banks was appointed Major in his place, while Wickens was promoted to Captain.

Trapaud, having returned from Fort Marlborough after a service there of three or four years, was appointed Captain-Lieutenant on account of his good service.

In August, Major Geils returned from England, and he was given out in orders as Major of Engineers.

Major Banks and Captain Simon Stuart complained of Major Geils taking rank in the Corps of Engineers, and a copy of their letter was sent to the Court of Directors.

From the conclusion of peace with Tippoo in March 1784, till the year 1790, no serious military operations were undertaken by the English, and during these six years I can find no record of an engineer officer having been employed on active military service in the field.

In September 1788 a small detachment of pioneers, under an European officer, was attached to the force under Lieutenant-Colonel James Eidington, which took possession of the district of Guntoor.

Again in March 1789, a detachment of eighty pioneers was sent from Trichinopoly to join the field force assembled under Lieutenant-Colonel Stuart, 72nd Regiment, for service in the Shevagunga country. It was present at the capture of Collaigoody on [illegible] May, and of Ranamungalum and Colacoil on 1st and 2nd June [illegible]pectively.

The Governme[illegible]urned their thanks to Colonel Stuart for his gallant and g[illegible]nduct, and desired that he would communicate to the [illegible] their perfect approbation of the spiri[illegible] the whole of the detachment durin[illegible] year 1784 to 1789, in spite of

Sketch of the
SOUTHERN COUNTRIES of
INDIA,
traversed by the ARMIES
commanded by
Col. Humberston & Col. Fullarton
in the Years 1782 1783 & 1784
Note. The March of Col. Humberston marked thus
The March of Col. Fullarton
East Lon. from Greenwich
ZAMORINS
DOMINIONS
COWLE
INDEPENDENT POLYGARS
ELEPHANT
DINDIGUL
TRITCHINOPOLY
TANJORE
NEGAPATAM
Tranquebar
Carical
Point Calymere
PALKS STRAITS
PALKS BAY
GULF OF MANAR
CAPE COMORIN
Madura
Tinevelly
Palamcotta
Ramanad
Paniany
Cochin
Quilon
Anjengo
Calicut
Tellicherry
Mangalore